Information structure in Avatime

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Information structure in Avatime

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Abbreviations

1	first person
2	second person
ADD	additive
AGR	agreement marker
$C_{number+s/p}$	noun class
CLM	clause linkage marker
CM	clause marker
COM	comitative
COMP	complementizer
COMPL	completive
COP	copula
CTR	contrastive
DEF	definite
DEP	dependent
DET	determiner
DETRANS	detransitive
DIST	distal demonstrative
FOC	focus
FP	final particle
HAB	habitual
ID	ideophone
INDF	indefinite
INF	infinitive
INT	intentive
INTJ	interjection
IT	itive
LOC	locative
LOG	logophoric
NEG	negative
NMLZ	nominalizer
NONPRES	non-present
OBJ	object
OOF	out of focus
p	plural
PFV	perfective
POSM	possessum
POSS	possessive
POT	potential
PRED	predicator
PROG	progressive
PROH	prohibitive
PROX	proximal demonstrative
PST	past
PURP	purposive
Q	question marker
REC	recurrent
RECP	reciprocal
RED	reduplication
REL	relative
s	singular
SBJ	subject
SBJV	subjunctive
SVM	serial verb marker
TM	terminal marker
TOP	topic
VEN	ventive

CHAPTER 1

Introduction

1.1 Scope and aim

This thesis is a detailed study of information structure in Avatime, a Kwa language spoken in Ghana. It provides a first description of the meanings and functions of several information structure constructions and particles, based mainly on a corpus of spontaneous speech. It also critically discusses pre-established notions of information structure, speaking to issues currently under debate in studies of information structure more generally.

The term information structure refers to the ways in which speakers package the information in their utterances in accordance with their understanding of the addressee's mental state (cf. Chafe, 1976). Information structure marking indicates how the information in the utterance relates to the addressee's previous knowledge and temporary mental state. Example (1) shows some of the information structure constructions and particles (in bold) that will be discussed in this thesis.

(1) Two interlocutors discuss what they see in a picture.

1 A: *ɔ-kà-ɛ* *a-klɔ* *yɛ* *kị̀-kpafụ-yɛ̀* *gì* *a-tá-sa*
C_{1s}-father-DEF C_{1s}.SBJ-clench C_{1s} C_{4s}-fist-DEF and C_{1s}.SBJ-INT-hit
o-ne-è *gì* *e-vù* *o-bi-è*
C_{1s}-mother-DEF REL C_{1s}.SBJ-hold C_{1s}-child-DEF
'The father clenched his fist and he is going to hit the mother who is holding the child.'

2 B: *yɛɛ*
'Yeah.'

3 A: ***ɔ-kàtsì-e*** ***pɔ̀*** *ɔ́-lɛ́* *ke-de-à*
C_{1s}-old.man-DEF **CTR2** C_{1s}.SBJ-stand:LOC C_{6s}-back-DEF
èé-di=ba *kpɛ*
C_{1s}.SBJ.PROG-look=C_{1p}.OBJ put.in
'**As for the old man**, he is standing behind and looking at them.'

4 B: *mhmm*

5 A: *mhmm*

6 B: *kɪ́lɛ* ***mɔ*** ***kɔ=ɛ*** *kɪ́lɛ* *má-mɔ* ***fɛ*** *ma-mɔ̀* *sɪ̀*
how **1s.CTR** **CTR1=CM** how 1s.SBJ-see **ADD** 1s.SBJ-see COMP
ɔ-kà-ɛ ***kʊ̀-dá*** *á-ŋwɛ*
C_{1s}-father-DEF C_{5s}-drink:**FOC** C_{1s}.SBJ-drink
'**As for me**, how I see it (**too**), I see that **the father**, he is **drunk**.'
(famprob_110316_MM-AlA)

Line 1 is unmarked for information structure, indicating that the default holds: the predicate (he clenched his fist and is going to beat the mother) provides the main information update (i.e. is in focus). In line 3, the contrastive particle *pɔ̀* 'by contrast' indicates that what is said about the old man needs to be interpreted with reference to what was said about the father in the previous utterance and the two are contrasted. Line 6 contains many information structure markers. The combination of contrastive pronoun and contrastive particle *mɔ kɔ* 'as for me' indicates that the information given needs to be interpreted with respect to the current speaker and is opposed to what the previous speaker said. The additive particle *fɛ* 'too' indicates a similarity between the current and the previous speaker - both saw something in the picture. *Kʊ̀dá* '(alcoholic) drink' is marked for focus by its clause-initial position and by a focus marker, indicating that 'drinking' is the main information update of this sentence and this is different from what the listener might expect (as speaker A seems to not have noticed this in the picture). Finally, *ɔkaɛ* 'the father', is placed before the focused element (left dislocated) to make it clear that this is the referent that is now under consideration (not the old man, as in the previous utterance).

The present thesis has two related aims. The first is to make an empirical contribution to the fields of information structure and descriptive linguistics. I will describe in detail the form and function of previously undescribed markers of information structure in Avatime. This description will be mainly based on spontaneous speech. The use of spontaneous speech rather than elicited sentences in isolation is important, because of the interaction-dependent nature of information structure and because speakers generally have a poor awareness of how information structure markers are used. In my description, I will not simply apply preconceived notions of informa-

tion structure to the Avatime data, but I will investigate how information-structure related constructions are used and formulate language-specific definitions.

The second aim is to compare these language-specific definitions to existing notions of information structure to assess the cross-linguistic applicability of these notions. Notions of information structure such as topic and focus are often implicitly or explicitly treated as universal (see e.g. Zimmermann & Onea, 2011). As shown by Matić & Wedgwood (2013), there is no reason to assume the universality of the category focus; the interpretation of what seems to be focus can arise in different ways. However, in linguistic description, forms are often given information structure labels such as 'topic' or 'focus' based on the application of only a few diagnostics. In the case of focus, for instance, whenever a linguistic form is used to set apart the part of the sentence that provides the answer to a content question, this is called a focus marker. For a better understanding of the cross-linguistic variability of information structure marking, it is necessary to start from language-specific, detailed descriptions that are based on spontaneous discourse.

In the remainder of this introduction, I will discuss some notions of information structure (Section 1.2), previous work on information structure in Kwa languages (Section 1.3), my methods of data collection (Section 1.4) and I will describe the structure of the remainder of the thesis (Section 1.5).

1.2 Notions of information structure

Two types of information structure can be distinguished. The first, which will not play an important role in this thesis, is the mental representation of discourse referents: whether a referent is in the addressee's consciousness or not, whether it was previously mentioned or is newly introduced, whether it is identifiable, etc. (see e.g. Gundel et al., 1993). The mental representation of discourse referents plays a role in the choice of definite versus indefinite articles and the choice between lexical NPs, pronouns and zero anaphora, among other things.

The second type of information structure and the one that will be important in the remainder of this thesis is the encoding of information structural relations (Lambrecht's (1994) pragmatic relations and Gundel's (1988) relational givenness/newness). This involves the partitioning of the sentence into different parts. Two ways of partitioning are usually suggested: (i) marking the part that provides the main information update (focus) versus the background against which this information update is made, and (ii) marking the element that the sentence is about (topic) versus the information

provided about this element (comment). Marked elements can also be contrasted, in which case a relation is established both with the remainder of the sentence and with a set of alternatives in the context.

In this Section, I discuss the three notions of focus, topic and contrast in more detail.

1.2.1 Focus

I define focus as the most informative part of the sentence. When speakers communicate, they try to increase their common ground, i.e. the knowledge that they share. They do this by linking new information to information that is already part of the common ground (see also Matić, in press). Most sentences contain both information that is already shared knowledge and information that is not yet shared. The latter information can be said to update the common ground. This common-ground update is what I refer to as focus. This view is very similar to that of Lambrecht (1994), who defines focus as the part of the sentence that is not presupposed.

An example of focus in English can be seen in (2) below. In English, focus is usually marked with a pitch accent, which is represented in the example by capital letters. The example shows that the assumptions the speaker makes about the state of the common ground at the current point in discourse determine which element of the sentence is focused. In (2a), the speaker assumes that the addressee knows that something killed the mouse, but does not know what. The subject of the sentence, *the dog*, is focused, as this updates the common ground. In (2b), the common ground update is provided by the object of the sentence, *the mouse*.

(2) a. Context: *Who killed the mouse? / It looks like the cat killed a mouse. (No,) The DOG killed it.*

b. Context: *What did the dog kill? / I think the dog killed a bird today. (No,) It killed a MOUSE.*

Another common definition of focus is that it indicates the presence of alternatives that are relevant for the interpretation of the focused element (Rooth, 1992; Krifka, 2007). This means that when interpreting a focus-marked element, we understand it within the context of the elements that could have replaced it. For instance, in example (2a) above, the interlocutors have alternatives to the dog in mind that could have killed the mouse. In the context of the first question, this is an unlimited set of alternatives, whereas in the second context a specific alternative is mentioned. The view of focus as evoking alternatives can be seen as compatible with the view of focus

as the main information update. Whenever we say something informative, this implies that things could have been otherwise and thus that there are alternatives (see Matić & Wedgwood, 2013).

The notion of focus will be discussed more extensively in Chapter 3 on the Avatime focus construction. I will also discuss different sub-types of focus that have been proposed and the different ways in which focus is expressed in languages.

1.2.2 Topic

The topic of the sentence is usually defined as 'what the sentence is about' (see e.g. Reinhart, 1981; Gundel, 1988; Lambrecht, 1994). Gundel (1988, 210) defines topic as follows: "An entity, E, is the topic of a sentence, S, iff in using S the speaker intends to increase the addressee's knowledge about, or otherwise get the addressee to act with respect to E." The topic is opposed to the comment, which is the remainder of the sentence and contains the information that is provided about the topic. Topics are often described using the metaphor of a file-card (Reinhart, 1981; Vallduví, 1990; Erteschik-Shir, 2007; Krifka, 2007). The topic is a file-card in memory on which the content of the proposition is 'written'.

Topics are usually referents that are familiar to the addressee, because in order to be able to 'increase the addressee's knowledge about' a referent, this referent should be known to the addressee. Lambrecht (1994) captures this in the 'topic accessibility hierarchy': brand new referents cannot be topics and the most likely topics are referents that have been previously mentioned. In the case of topics, there is thus an interplay between the two dimensions of information structure discussed in the previous section: the mental representation of discourse referents and information structural relations.

Topics are typically not marked as such. Most frequently, the subject of the sentence is the topic (the topic has also been called psychological subject by e.g. Chafe, 1976). Topics are often not expressed at all, as they can usually be recovered from the context. In languages that require overt expression of arguments, topics are most often expressed by unstressed pronouns. Topics tend to be marked only when they are different from the topic of the previous sentence or when the topic is contrasted to another referent. In English, constructions that can mark new or contrastive topics are left dislocation as in (3) and topicalization as in (4).

(3) ***This spot in the rug**, you better get it out before the party on Saturday.*
(Gundel, 1975, 72)

(4) ***The necklace of coral beads*** *she inherited when a friend died.*
(Prince, 1998, 292)

A problem with the definition of topic is that there does not seem to be a good way to determine what the sentence is about. Some tests have been suggested (see e.g. Gundel, 1975; Reinhart, 1981), but to some extent these tests still rely on the linguist's intuition of what the sentence is about. Another problem is that there are often multiple elements in a sentence that it can be said to be about. In (4) above, the sentence could be about *the necklace of coral beads* but it could also be said to be about *she*. The latter is the subject and an unstressed pronoun, both indications of topichood. The possibility of having multiple topics in the same sentence is a fundamental problem for theoretical accounts that allow only one topic in a sentence, such as that of Reinhart (1981). However, if sentences are allowed to have an unlimited number of topics, then it becomes even less clear what 'being about' really means.

Another issue is what kinds of elements can be topics. In the relevant literature, topics are usually taken to be referential expressions. However, adverbial phrases often behave similarly to topics: they can often be marked with similar linguistic markers and/or can occur in the same sentence position. Because of this, Klein (2008) uses the notion 'topic situation'. According to him, the topic of a sentence is the entire situation with respect to which the sentence holds. This includes the time and place, but may also include referents. Elements of the topic situation are overtly expressed if they need to be highlighted, for instance because the topic situation has changed. Klein's framework seems to work well for adverbial phrases and it can deal with the problem of multiple topics: when there seem to be multiple topics, this simply means that multiple elements of the topic situation are specified. However, Klein's framework does still not provide a clear way of knowing whether a referential expression is part of the topic situation or not.

In this thesis, the notion topic will be relevant mainly in Chapter 4 on left dislocation and Chapter 5 on contrastive particles. The contrastive particles seem to be marking contrastive topics (see the next section), but I show that the notion of topic is not needed to capture their function. The function of left dislocation is closely related to the notion of topic, but again it does not seem useful to simply describe left dislocated elements as topics.

1.2.3 Contrast

In the information structure literature, contrast is often talked about as something that can be added to either topic or focus (see e.g. Repp, 2010).

The term contrastive focus usually refers to cases where the focused element contradicts a presupposition or a statement made about a different topic. Dik (1997) refers to these two types of contrastive focus as counter-presuppositional and parallel, respectively. An example of counter-presuppositional focus can be seen in (5). Here, *bananas* contradicts an assumption of the previous speaker. An example of parallel focus can be seen in (6). In this example, *nice* and *boring* are the contrastive foci, while *John* and *Bill* are the contrastive topics.

(5) A: *John bought apples.*
B: *No, he bought BANANAS.* (Dik, 1997, p. 334)

(6) *John and Bill came to see me. JOHN was NICE, but BILL was rather BORING.* (Dik, 1997, p. 326)

Contrastive focus will be discussed more in Chapter 3 on the Avatime focus construction.

Contrastive topics have been defined either in a broad sense or in a narrow sense. In the broad sense, they are simply topics that evoke a contextually relevant alternative (Krifka, 2007; Büring, 2003; Vallduví & Vilkuna, 1998). In the narrow sense, contrastive topics evoke alternatives and in addition indicate that there is an opposition between what is said about the topic and the alternative (Prince, 1998; Myhill & Xing, 1996; Taglicht, 1984). In (6) above, *John* and *Bill* are contrastive topics. According to the broad definition, this is simply because they are contextually relevant alternatives to each other. According to the narrow definition, the opposition between being nice and being boring is also part of the notion of contrastive topic. Exactly how the notion of opposition needs to be defined to capture this intuition is not clear. The notion of contrastive topic will be especially important in Chapter 5 on contrastive particles, where the literature will also be discussed more elaborately. Contrastive topics will also play a role in Chapter 6 on additive particles.

Whether contrastive focus and contrastive topic involve the same notion of contrast is not entirely clear. From a conceptual point of view, the two notions are different in the sense that contrastive focus directly encodes an opposition (e.g. nice versus boring) whereas contrastive topics (e.g. John and Bill) are opposite by virtue of what is said about them (see also Taglicht, 1984, 46). The difference could simply be due to the fact that a unified concept of 'contrast' is added to focus in one case and to topic in another case, as some authors suggest (Vallduví & Vilkuna, 1998; Molnár, 2002). In

some languages, the two types of contrast may indeed be expressed in the same way, but this is not necessarily the case for all languages. The extent to which Avatime provides support for a single notion of contrast will be discussed in the general discussion, Chapter 8.

1.3 Information Structure in Kwa languages

Information structure in Kwa languages has received increasing attention in recent years. I will not mention all the relevant literature on individual Kwa languages here, but point the reader to Ameka (2010), who gives an overview. Many Kwa languages have focus constructions that involve either fronting or a morphological focus marker or both. They also tend to have a sentence-initial topic position, a topic marker and several topic- and focus-related particles indicating notions such as contrast, additivity and exclusivity. In the remainder of this section I give a brief overview of focus marking (Section 1.3.1) and topic marking (Section 1.3.2) in Kwa languages.

1.3.1 Focus

An example of a focus-construction can be seen in (7) from Logba. In (7a) the focus-marked object occurs in sentence-initial position and is followed by the focus marker *ka*. Example (7b) shows a canonical sentence for comparison.

(7) a. *ebitsi=ɛ́* ***ka*** *Setɔ* *ɔ́-lá*
child=DET **FOC** Setɔ SBJ.s-beat
'Setɔ beat [the child]$_{FOC}$.' (Logba: Dorvlo, 2008, 228)

b. *Setɔ* *ɔ́-lá* *ebitsi=ɛ́*
Setɔ SBJ.s-beat child=DET
'Setɔ beat the child.' (Logba: Dorvlo, 2008, 227)

In many Kwa languages such as Ga and Attié, the focus marker is optional when the object or adjunct is focused. In the case of subject focus, the focus marker is obligatory in all the languages that have one (Ameka, 2010). As Kwa languages have a basic SVO word order, the focus marker may be the only element distinguishing a subject-focus construction from a canonical construction. An example of subject focus can be seen in (8).

(8) *mamá-**é*** *ná* *ga* *Kofí* *le* *así-me*
grandmother-**FOC** give money Kofi LOC market-inside
'[Grandma]$_{FOC}$ gave money to Kofi in the market.'
(Ewe: Ameka, 2010, 150)

In Ewe, there is no reference to the focused element in the out-of-focus part of the clause. Some other Kwa languages, however, allow resumptive pronouns in subject-focus constructions. In some languages, such as Ga, resumptive subject pronouns are optional. In other languages, such as Akan and Yoruba, they are obligatory (Ameka, 2010). An example from Akan can be seen in (9). Example (9a) shows the subject focus construction and (9b) shows a canonical sentence for comparison. Note the clitic-pronoun *è-* on the verb 'eat' in (9a), which is absent in (9b).

(9) a. *è-yè àbrèwá nó* ***nà*** ***è-dîì*** *àdùá nò*
3s-COP old.woman DEF **FOC** **3s-eat** beans DEF
'It is the [old woman]$_{\text{FOC}}$ who ate the beans.'

b. *àbrèwá nó* ***dìì*** *àdùá nò*
old.woman DEF **eat** beans DEF
'The old woman ate the beans.' (Akan: Fiedler & Schwarz, 2005, 116)

Akan also uses resumptive pronouns in object position, but only when the object is animate. This can be seen in (10).

(10) *Mààmé Ámá* ***nà*** *Kwèsi bóró-ò nó*
Maame Ama **FOC** Kwesi beat-COMPL 3s.OBJ
'Kwesi beat [Maame Ama]$_{\text{FOC}}$.' (Akan: Amfo, 2010, 200)

In some Kwa languages, the difference between subject focus and non-subject focus is conveyed through oppositions in the verbal morphology (Ameka, 2010; Fiedler & Schwarz, 2005). An example is Likpe, in which different tense/mood/aspect/subject markers are used depending on whether the subject is focused or not. A subject-focus construction can be seen in (11a) and a canonical construction in (11b).

(11) a. *osaní á-mə́* ***lì****-tə́kə.n.ko usió á-mə́*
man AGR-DET **DEP:PST**-follow woman AGR-DET
'[The man]$_{\text{FOC}}$ followed the woman.'

b. *osaní á-mə́* ***ə****-tə́kə.n.ko usió á-mə́*
man AGR-DET **SBJ**-follow woman AGR-DET
'The man followed the woman.' (Likpe: Ameka, 2010, 151)

Most Kwa languages that have a focus marker use it only in combination with fronting of the focused element. An exception to this is Akan, in which the focus marker can occur in other places in the sentence (12). When the focus marker occurs clause-internally, the interpretation is different from that of fronted focus: in in-situ focus, the marked element provides

an explanation, whereas fronted focus conveys a counter-presuppositional interpretation (Bearth, 1999).

(12) 1 A: 'Kofi has already come.'

2 B: *àánè ɔ-dè káà* ***nà*** *è-bá-à-è-é*
yes 3s-take car **FOC** 3s-come-PST-DETRANS-TM
'Yes, he came by [car]$_{FOC}$.'
(Akan: Bearth, 1999, 260, glossing from Ameka 2010)

Verb focus is most often marked by placing a copy of the verb in the clause-initial focus position. This may either be a copy of the verb root or more commonly a nominalized form of the verb (Ameka, 2010). In some languages, this initial verb is followed by the focus marker. An example can be seen in (13).

(13) ***n-kyerɛw*** ***na*** *me-kyerɛw*
NMLZ-write **FOC** 1s-HAB.write
'I [write]$_{FOC}$' (Akan: Boadi, 1974, 38, glossing from Ameka 2010)

The forms of the focus constructions in several Kwa languages are relatively well described. However, their functions have received less attention. Focus constructions have mostly been studied in the context of question-answer pairs and their occurrence in more natural discourse has rarely been taken into account. In Chapter 3 of this thesis I aim to fill this gap by describing in detail the functions of the Avatime focus construction.

1.3.2 Topic

Several Kwa languages have been claimed to have topic markers. Ameka (1992) describes scene-setting topic constructions in Ewe and Akan. These constructions involve a sentence-initial element which is optionally marked by a topic marker. The Ewe topic-marker *lá* is described by Ameka (1991, 152) as marking information that "a speaker wants an addressee to assume in order for him/her to process the rest of the discourse more easily". The topic markers in Kwa languages are often identical or related to definite articles or demonstratives. A resumptive pronoun crossreferencing the initial topic often occurs in the remainder of the sentence. Examples can be seen in (14) and (15).

(14) *égbe* ***lá*** *tsi dza*
today **TOP** water fall
'Today, it rained.' (Ewe: Ameka, 1992, 14)

(15) *ɖeví-á-wó* ***lá,*** *ŋútsu má fo wó*
child-DEF-P **TOP** man DIST beat 3p
'The children, that man beat them.' (Ewe: Ameka, 1992, 14)

Ameka (2010) distinguishes two different kinds of topics in Kwa languages: frame topics and contrastive topics. Frame topics correspond to the scene-setting topic constructions described above. Contrastive topics are marked by different particles that translate to English expressions such as 'as for', 'also', 'all', 'on the other hand', 'rather', 'only' and 'even'. Fiedler (2009) argues that in Aja, the additive particle *cán* 'also/too' marks contrastive topics. Example (16) summarizes different types of food and when they have been cooked. The first two dishes are marked with the 'frame topic' marker *ɔ́*, whereas the last one is contrasted against the others using the additive particle *cán* 'also, too'.

(16) Maria has invited some friends for dinner. For this, she has prepared different dishes.

1 *ègblɛ́n* ***ɔ́,*** *nyísɔ́ ɖìyí yí é tɔ́ yɛ́ ɖàɖá*
akassa **TOP**, yesterday since FOC 3s begin 3s cook.RED
'The akassa, she already started to cook it three days ago, ...'

2 *èlán* ***ɔ́,*** *é tɔ̀ yɛ̂ èsɔ́*
meat **TOP** 3s grill 3s yesterday
'the meat, she grilled it yesterday...'

3 *ǹtɔ́nú* ***cán,*** *égbɛ́ é xó yɛ̌ ké*
sauce **ADD**, today 3s hit 3s PRED
'and as for the sauce, she prepared it today.'

(Aja: Fiedler 2009, p11)

Ameka (2010) suggests that frame topics and contrastive topics, apart from being marked by different particles, also occupy different positions in the clause. This is based on Ewe, where frame topics always precede focused elements, whereas contrastive topics may follow the focus. An example can be seen in (17). In this example, the contrastive topic *nye ya* 'as for me' follows the focused element, but does not occur in the normal subject position, which is already taken up by the first person singular pronoun *me* (there is normally no subject agreement in Ewe).

(17) *le nyatefé me lá, dzóɖágbe-é nye* ***ya*** *me-vá*
LOC truth inside TOP Monday-FOC 1s **as.for** 1s-come
'In truth, [Monday]$_{\text{FOC}}$ I (in contrast to some others) came.'

(Ewe: Ameka 2010, 143)

Contrastive topics in Gbe languages may also precede the focused element, as noted both by Ameka for Ewe (18) and by Fiedler (2009), citing Aboh (2003), for Gun.

(18) *nye hã̂ vegbe-tɔ́-wó-é me-nyé*
1s ADD Ewe-NMLZ-P-FOC 1s-COP
'I too, an Ewe I am.' (Ewe: Ameka 2010, 167)

As this section has shown, comparatively little research has been done on topics and contrastive particles in Kwa languages. A question that remains open is whether a principled difference can be made between frame topics and contrastive topics and if so whether these two types occur in different positions in the sentence. Another question is what the exact meanings and functions are of the different particles that have been claimed to mark contrastive topics. I will come back to these questions in Chapter 4 on left dislocation and Chapters 5, 6 and 7 on contrastive and additive particles.

1.4 Data collection

The work presented in this thesis is based on a corpus of 48 transcribed and translated recordings of spontaneous speech (7 hours), collected during fieldwork in the Avatime area. Most of these are video recordings made with a high definition camera. The corpus contains various genres of speech: narratives, interviews about cultural practices, public meetings and conversation. I also used a variety of elicitation methods to gather additional data. In this section, I will discuss the fieldwork, the different research methods I used and the corpus I collected in more detail.

1.4.1 Fieldwork

Most of the data used for this thesis was collected over the course of four field trips: 3 months in 2010, 6 weeks in 2011, 4 weeks in 2012 and 4 weeks in 2013. In addition, I used data collected by Rebecca Defina in the same period of time (2010-2012) (see also Defina, in preparation). I also used data that Rebecca Defina and I jointly collected during a 4-month field trip in 2008.[1] For more information about the types of data collected during that trip, see Defina (2009) and van Putten (2009).

[1]This field trip was funded with a Field Trip Grant from the Endangered Languages Documentation Programme. The data is archived at ELAR and can be found at http://elar.soas.ac.uk/deposit/0136.

During my field trips, I stayed in Vane in the Volta Region of Ghana (see Section 2.1.1), one of the villages where Avatime is spoken. I worked regularly with a number of consultants to elicit data and transcribe recordings. I collected spontaneous discourse from a large number of different people, to ensure a diverse corpus. I also cooperated with the junior secondary school, to do several elicitation tasks with the students there. The consultants I worked with regularly were paid a fixed fee per hour or per week. The people I recorded on a single occasion would usually receive a small token of appreciation such as a packet of biscuits or an exercise book or more rarely a small monetary gift.

Grammatical elicitation sessions and most other elicitation tasks were audio recorded with an Olympus LS10 linear PCM recorder and a headset microphone. The headset microphone ensured good audio quality in different, often noisy environments. All other types of discourse were video recorded. The video camera used was the JVC GY-HM100U, a high definition camera with advanced audio recording options (for a review of the use of this camera for language documentation, see Hammond (2011)). This camera was usually mounted on a tripod and used in conjunction with a wide angle lens and external microphones (either a single stereo microphone or two mono microphones recording separate channels) that were placed close to the people being recorded. This yielded high quality video and audio data which, after a simple transcoding process (see Hammond, 2011), could directly be played on a computer. I transferred all recordings to my computer during the field trip so that I could transcribe and translate them with the help of native speakers in the field. Recordings were annotated using ELAN, a multi-media annotator developed at the Max Planck Institute for Psycholinguistics (Wittenburg et al., 2006), which can be found at http://tla.mpi.nl/tools/tla-tools/elan/.

Prior to the first field trip, permission to do research was obtained from the chiefs and elders of Vane. Before every recording, the potential participants were asked if they wanted to participate in the recording. Afterwards, the participants got the opportunity to see the recording and were asked whether they wanted to restrict the access rights. They also received a copy of the recording on a DVD. Most people were happy for anyone to view their recordings, but some people opted to restrict access to the researchers only. I gave recordings of spontaneous conversations restricted access by default, as these sometimes contain potentially sensitive information about people in the village.

1.4.2 Methods

I have used different methods to collect data. A division can be made between elicitation and the recording of spontaneous discourse. The main focus of the research presented in this thesis has been on spontaneous discourse, but I have often found it useful to complement this with elicitation (see Chelliah (2001) for a critical evaluation of the use of elicitation and naturalistic discourse in fieldwork).

1.4.2.1 Elicitation

The elicitation methods I used can be thought of as ranging from least naturalistic and most controlled to most naturalistic and least controlled. On the former end are grammar elicitation sessions in which consultants are asked for grammaticality judgments and translations from English and on the latter end are free narrations of stories presented in pictures or videos.

In grammar elicitation sessions, I would ask a consultant to translate English sentences to Avatime or I would present a consultant with an Avatime sentence and ask if it was correct. If the consultant judged it grammatical, I asked him or her to repeat it. I always aimed to present the same sentences to three different consultants, to ensure that the (un)acceptability of a sentence was not due to some misunderstanding. These grammar elicitations proved especially useful in the investigation of phonological phenomena such as tone raising and morphosyntactic phenomena such as agreement paradigms. They are limited, though, when it comes to investigating pragmatically marked or infrequent constructions. In my investigation of information structure, I have used grammar elicitation mostly to gain an initial understanding of the phenomena I was interested in, as it is an easy way to test out some possibilities. I then checked my findings against my corpus of spontaneous speech. In turn, I would use findings from spontaneous speech to inform further elicitation sessions.

A slightly different type of elicitation is to use question-answer pairs, a method often used in information structure research. Consultants are presented with a question and a single-word answer to that question. They are then asked to formulate the answer to the question as a complete sentence. This way, consultants are encouraged to imagine the situation, which might lead to a more natural answer in the particular context than would have been obtained via translation. In addition to my own constructed question-answer pairs, I also used the questionnaires on focus and topic from the Questionnaire on Information Structure (Skopeteas et al., 2006), a collection of elicitation methods for the study of information structure.

To get more naturalistic data but still control what kinds of linguistic structures will be produced, consultants can be presented with pictures or short video clips and asked to describe what they see or to answer a question about what they see. I have used several different video and picture elicitation tasks.

I have used the following experimental tasks from the Questionnaire on Information Structure (Skopeteas et al., 2006): 5, 11, 12, 14, 24 and 26. These are pictures that people either had to describe or were asked questions about. They are designed to study the expression of different types of focus, contrast and givenness.

I also developed my own elicitation videos to study additivity and contrast. These materials are described in detail in Chapter 7.

Another elicitation task I used is the 'finite story' (see Dimroth et al., 2010). In this task, speakers describe individual video clips which together form a coherent story. The story revolves around three brothers who live together in a house. After each scene, the movie stops and the speaker is asked to narrate what he or she saw. The three brothers in the movie are often involved in identical or opposite actions, which makes this task useful for eliciting additive and contrastive particles.

Another task that involves both the description of individual events and a larger narrative is the 'family problems' task (San Roque et al., 2012). In this task two participants are first presented with a series of pictures that they describe one at a time. The pictures can be ordered to form a coherent narrative, but are initially presented separately in a mixed-up order. After the participants have described the pictures, they are asked to put them in the right order to form a narrative. In the last stage, one of the participants narrates the story to a third person.

The final elicitation tasks to be mentioned here are the 'frog story' and the 'pear film'. The former is a wordless picture book that shows a boy on a search for his escaped pet frog (Mayer, 1969). A speaker uses this book to tell the story to a listener, who does not see the pictures. The 'pear film' is a 6 minute film that tells the story of a boy stealing a basket of pears (Chafe, 1980). A speaker watches the film and then tells the story, from memory, to a listener who has not seen the film. The data resulting from these tasks can also be classified as spontaneous discourse, as people are entirely free in how to describe what they have seen.

1.4.2.2 Spontaneous discourse

Within the category of spontaneous discourse, distinctions can be made between more or less spontaneous speech events. However, what all recordings

have in common is that the speaker has great freedom in deciding on the content of what they say.

The recordings of spontaneous discourse can be divided into four categories: narratives, descriptions of procedures, public meetings and conversation.

To record narratives, I would approach people to ask if they knew any folk tales and if so, if they would be willing to have them recorded. If they were, I would make sure at least one other native speaker was present to listen to the story. The narrators were usually older people (over 60 years old). Up to a few generations ago, the Avatimes had a tradition of storytelling in the evening after dark, but this tradition has been lost.

For procedural descriptions, I would usually ask a helper if they knew somebody who was knowledgeable about a particular topic, such as traditional medicine or how funerals are performed. The helper would then interview this expert. Some of these recordings have the structure of an interview, but in others, the helper would just let the expert speak. These recordings, apart from their linguistic value, also provide a lot of valuable cultural information.

I made recordings of three public meetings, in which people gathered in the community center to discuss issues. One was a meeting of the Avatime old people's association, one was a meeting in which all the chiefs from the different Avatime towns gathered to discuss a number of issues and one was a meeting in which a group of girls were reprimanded after breaking a local rule on how they should dress.

Finally, I made a number of recordings of conversations. These were obtained in different ways. In some cases, I asked people that I knew if they could get some friends together to record their conversation. In other cases I approached people who were already chatting and asked if I could record them. Using the former strategy, the conversation sometimes turned out a bit forced as speakers tried to raise topics just to keep talking. In the latter cases, after an initial period of being distracted by the camera, the conversation usually proceeded naturally. In most cases, I would leave the scene after setting up the camera and return after some time.

The narratives and procedural descriptions have been transcribed in their entirety. From the meetings and conversations, I chose fragments to transcribe, as these recordings are longer and more difficult to transcribe because they involve multiple speakers.

1.4.3 Data

The data collected by Rebecca Defina and me in the period 2010-2013 comprises 87 recordings of spontaneous speech, which includes elicited narratives such as descriptions of the pear film. Out of these recordings, 53 are (completely or partially) transcribed and translated. 12 of these have also been provided with interlinear glosses.

Of the transcribed recordings, 46 have been additionally annotated for information structure marking. In addition, two recordings from our corpus collected in 2008 (see Section 1.4.1 above) were annotated for information structure marking. Together, these information-structure annotated recordings amount to 7 hours of speech. This 7-hour corpus forms the basis of the work presented in Chapters 3 through 6 of this thesis. In some cases, subsets of this corpus were used. How these subsets were selected is discussed in the relevant sections.

All recordings are archived at The Language Archive (TLA), which is located at the Max Planck Institute for Psycholinguistics and can be found at https://corpus1.mpi.nl/ds/asv/?1.

The Avatime linguistic examples in this thesis include a reference to the recording they are taken from, which occurs at the end of the example between parentheses. This reference is the file name as it can be found in the archive. The file names provide some information about the type of recording. If the file name starts with *elic*, it is a grammar elicitation session and if it starts with *STIS*, it contains data obtained using tasks from the Questionnaire on Information Structure (Skopeteas et al., 2006). Renditions of the pear film start with *pear*, the frog story with *frog*, the finite story with *FinSto* and the family problems task with *famprob*. Folk tales start with *kadzidzia*, the Avatime word for folk tale and conversations start with *conv*. In other cases, the file name reveals the topic or the occasion of the recording. The initial keyword of the file names is followed by the date of recording in YYMMDD format, which is in some cases followed by the initials of the participant(s) in the recording. If the file name does not contain a date, it is from the 2008 corpus. If the file name starts with R, S or RS it is an elicitation session from the 2008 corpus.

1.5 Structure of the thesis

The remainder of this thesis consists of six chapters followed by a general discussion.

Chapter 2 provides a grammar sketch of Avatime. It starts with informa-

tion about the language and its speakers, followed by basic information about the phonological, morphological and syntactic properties of the language. This chapter is meant as background to enable the reader to understand the discussion and the examples in the remainder of the thesis.

Chapter 3 is about the Avatime focus construction. In this chapter, I describe in detail what kinds of elements can be marked for focus. I also discuss to what extent the part of the sentence that is interpreted as being in focus can be smaller or larger than the element that is marked for focus. Finally, I discuss the function of focus marking. Focused elements are not necessarily focus-marked. I investigate the various contexts in which focus marking is used and ultimately come to a unified description of the function of focus marking.

Chapter 4 discusses left dislocation. It indicates how left dislocation can be identified and shows that this has to be done on a language-specific basis. After that, I show what kinds of elements can be left-dislocated and discuss particles that can combine with left dislocated elements. I then discuss the occurrence in Avatime of left dislocation within subordinate clauses. The fact that this is possible is unexpected if left dislocated elements are analyzed as orphans, occurring outside of the syntactic structure. I show that an analysis in the Role and Reference Grammar framework can better account for the Avatime data. Finally, I discuss the function of left dislocation. The two main functions of left dislocation are referent introduction and indicating set membership. I show how these two functions can be unified within a more general account.

Chapter 5 discusses contrastive particles. Avatime has three contrastive particles that seem to have more or less the same function. I discuss their syntactic distribution and investigate the contexts in which they occur. The particles tend to combine with non-focused elements and indicate that there is an opposition between the element they combine with and a contextually salient alternative.

Chapter 6 covers the distribution and function of the additive particle *tsyɛ*. Unlike what has been claimed about additive particles cross-linguistically, the Avatime particle is not predominantly a focus particle: it can be used both with focused and non-focused elements. The particle can function similarly to additive particles in languages such as English and German, but it has a wider range of uses. More particularly, it does not require identity between incomplete propositions. I investigate what uses the particle has and propose an account for its various functions.

Chapter 7 presents the results of a preliminary production experiment investigating the use of contrastive and additive particles. In this experiment,

participants describe video clips that show a variety of event pairs. Using these descriptions, I investigate the influence of different factors, such as similarity of events and whether they happen simultaneously or in sequence, on the use of the various particles.

Chapter 8 summarizes the thesis and points out theoretical implications and suggestions for further research. A recurrent theme in the various chapters is the relation between context and meaning. My findings show that even though the use of information structure markers is restricted by context, context does not determine meaning and the constructions and particles discussed can be analyzed as having one general meaning but multiple functions in different contexts. I also discuss the applicability of notions of information structure to the Avatime data. Some of these map onto Avatime constructions or particles whereas others are less useful for the description of Avatime. Further research that this thesis can form a foundation for includes psycholinguistic research into the link between information structure marking and processing and detailed typological work on information structure meanings.

CHAPTER 2

Grammar sketch

2.1 Introduction

2.1.1 Location and speakers

Avatime is spoken in eight villages in the Volta Region of Ghana.[1] The Avatime traditional area is located about 50 kilometers north of Ho, the capital of the region, close to the border with Togo. The villages in which Avatime is spoken are Amedzofe, Biakpa, Dzogbefeme, Fume, Gbadzeme, Old Dzokpe, New Dzokpe and Vane. The locations of these villages with respect to each other and the location of the Avatime area within the wider area can be seen on the map in figure 2.1.

I estimate the number of speakers of Avatime at about 15,000. The most recent number available for the total number of inhabitants of the Avatime villages dates from the year 2000 and is 7,479. Based on the population growth in Ghana as a whole between 2000 and 2010, this number of inhabitants likely increased to about 10,000 in 2010. As the number of inhabitants of the Avatime area has likely continued to grow since 2010 and there are large Avatime communities in Ho and Accra, I expect the total number of speakers to be about 15,000 at the moment. Interestingly, this number is quite different from the estimation by Ethnologue (Lewis et al., 2013) which lists 24,000 speakers, based on data from an unknown source from 2003.

The speakers of Avatime refer to their land as *Kedeame*, which literally means 'in the back' (*kede* 'back' + *a* 'DEF' + *mɛ* 'inside'). A male Avatime person is referred to as *Kedɔnɛ* and a female Avatime person as *Kededze*. These are contractions of the word *kede* 'back' with *ɔ́nɔ̀è* 'person' and *odze*

[1] This chapter is based on research conducted jointly with Rebecca Defina. See also Defina (in preparation).

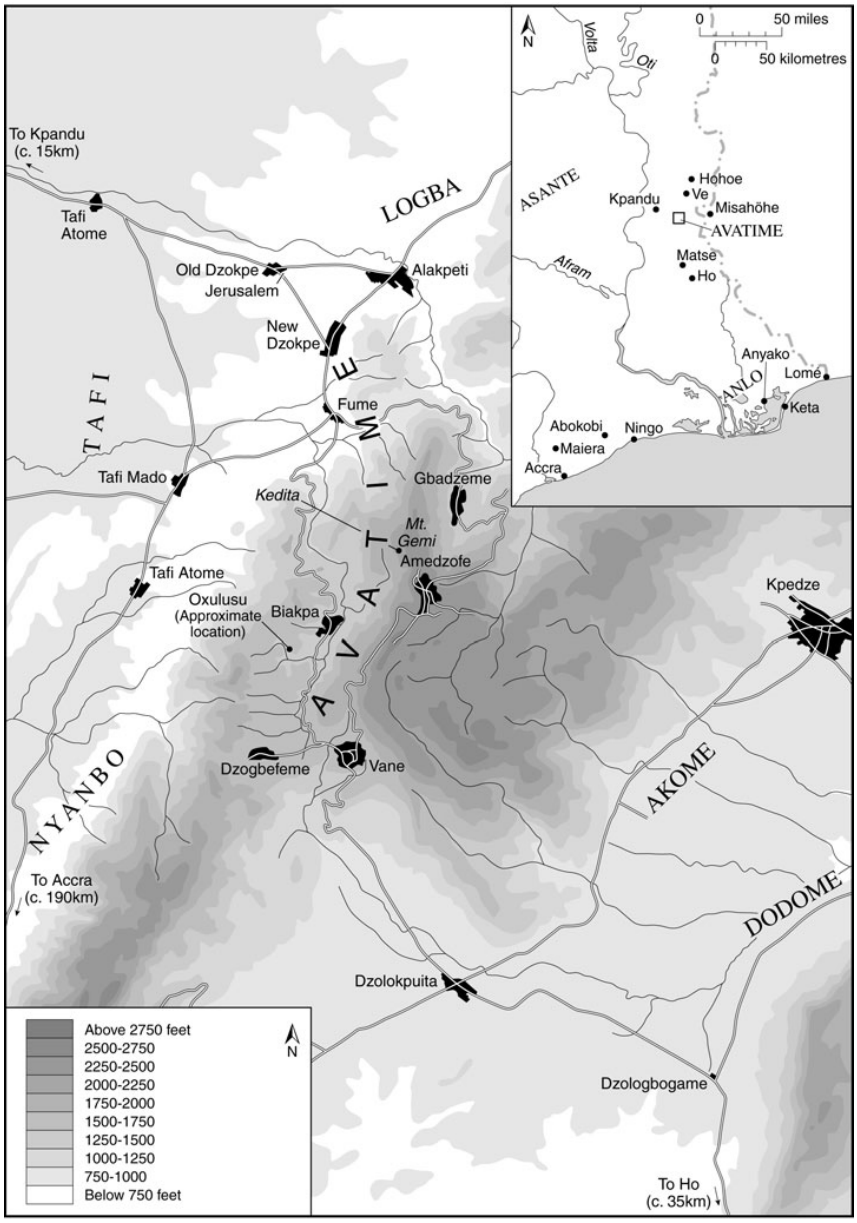

Figure 2.1: Map of the Avatime traditional area and some surrounding villages. The inlay shows the location of the Avatime area within the wider area. From Brydon (2008, 25).

'wife' respectively. Avatime people in plural are referred to as *Kedana*, a contraction of *kede* and *bánɔà* 'people'.

Avatime is the name that is given to the language and the people by the Ewe, the dominant group in the region. Avatime people refer to their own language as *Sị̀yàsɛ* or *Sìdemè(se)*. *Sị̀yà* is the Avatime word for language, consisting of the root *ya* and the prefix *si-*, which is a noun class prefix (see Section 2.3.1) that occurs on names for languages (e.g. *sì-gbe-sè* 'Ewe', *sị̀-yɛ̀fɔ-sɛ̀* 'English', from *yɛ̀fɔ* 'white person'). With the definite article *-sɛ* added, *sị̀yàsɛ* can mean 'the language' or (more commonly) 'the Avatime language'. The term *Sìdemè(se)* seems to be a recent invention from the GILLBT (Ghana Institute for Linguistics, Literacy and Bible Translation) team stationed in Vane, working on translation of the Bible into Avatime. It seems to be based on the word for the Avatime area, *Kedeamɛ̀*. The term consists of the noun class prefix *si-*, the root for 'back', *de*, the postposition *me* 'inside' and optionally the definite article *-se*. When I first came to the Avatime area in 2008, most people referred to their language as *Sị̀yàsɛ* and many had never heard of the term *Sìdemèse*. However, the term is slowly gaining acceptance and is used by an increasing number of people.

To avoid choosing one or the other term, I decided to refer to the language as Avatime in my work. Another reason for this is that Avatime is the name that has been used in most of the previous linguistic and anthropological literature. Even though Avatime is a name given by outsiders, it is not considered derogatory and when speaking to outsiders, Avatime people regularly refer to their language and ethnic identity as Avatime. They also use this name on the internet on their official website www.avatime.org and for instance in a facebook group called Avatime Roots.

According to their oral history, at some point in the past, the Avatime lived in Ahanta, in the South-West of Ghana (see also Heine, 1968; Brydon, 2008). After many adventures, they arrived at their current location, where a group of people had already been living. These people are referred to as the Baya people. The incoming migrants mixed with these Baya people and currently there are Baya clans in every Avatime village (Brydon, 2008). The name *Sị̀yàsɛ* for the language suggests that the immigrants took over the language of the Baya people, as both words contain the root *ya* and the noun class prefix *si-* is used for languages and *ba-* for people (see also Heine, 1968).

Most Avatime people are subsistence farmers. Each person has several plots of land in the area around the village. The main staples are cassava, maize, yams and rice. Avatime is known for a tradition of rice cultivation and there used to be many traditions attached to this crop. A detailed description of these rice-related traditions can be found in Brydon (1981). In the last

decades, rice cultivation has become less common, as other crops are easier to grow, and the associated traditions have mostly disappeared. In 2010, the Paramount Chief of Avatime introduced a yearly week-long rice festival in order to revive rice-related cultural practices.

The Avatime community is organized on the basis of a chieftaincy system modeled on that of the Ashanti. This system seems to have been adopted relatively recently, most likely in the early 19th century (Brydon, 1981, 2008). Each of the Avatime villages has its own chief (*okusie*) and the entire Avatime traditional area is led by a Paramount Chief (*osie*), whose residence is in Vane.

More traditionally, each Avatime village is divided into clans (*akpɔ*, sg. *l̩ikpɔ*). Within clans, there are smaller patrilineal groups (*iku*, sg. *oku*). The elder of each *oku* is in charge of land allocation and decides where people are allowed to build and farm. More information about the clan system can be found in Brydon (1981, 2008).

2.1.2 The language in context

Avatime is classified as one of the Ghana-Togo Mountain (GTM) languages, which is a group of 14 languages spoken in Ghana, Togo and Benin. The GTM languages are usually considered part of the Kwa family, which belongs to the larger Niger-Congo phylum. In earlier work, the GTM languages have been called *Togorestsprachen*, 'Togo Remnant Languages' (see e.g. Heine, 1968) and Central Togo Languages (Kropp Dakubu & Ford, 1988).

Heine (1968) divides the GTM languages into two main branches: Na and Ka. The names for these groups are based on the reconstructed words for 'meat'. Avatime belongs to the Ka branch, together with Tafi/Tɛgbɔ, Nyagbo/Tutrugbu, Animere, Kebu, Tuwuli/Bowili, Ahlo/Igo and Ikposso. The map in figure 2.2 shows the locations of the GTM languages. Branch I on the map refers to the Na languages and Branch II refers to the Ka languages.

There is some dispute over whether or not the GTM languages form a separate branch of Kwa. Heine (1968) reconstructed the GTM languages as descending from a common ancestor and Kropp Dakubu (2008) maintains this analysis and suggests that within Kwa, the GTM languages are most closely related to the Tano languages (including Bia, Akan and Guang). Blench (2009), however, does not see enough evidence for positing GTM as a separate branch of Kwa. A problem with classification of the GTM languages is that the Kwa language family itself is not well-defined and it is not clear how its potential subgroups are related to each other. Blench (2009) analyzes the GTM languages as three distinct groups of related languages that

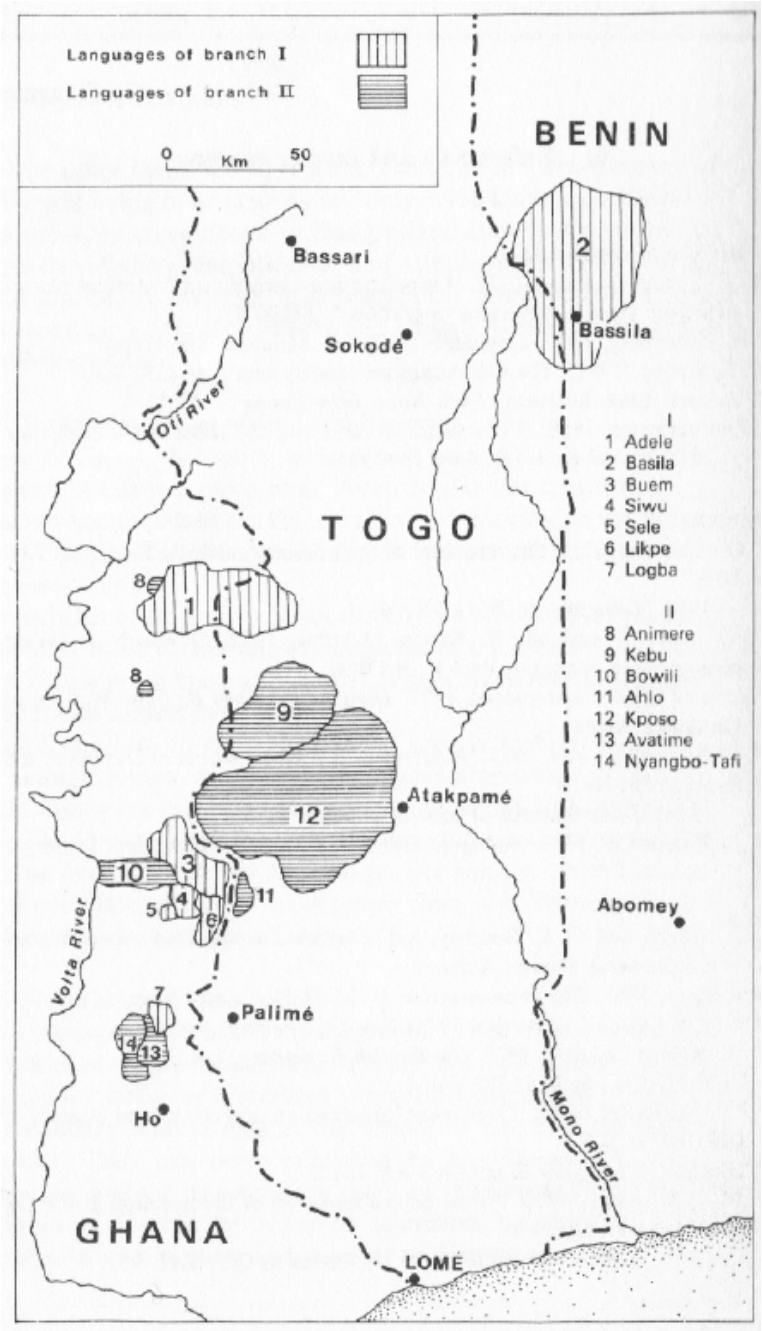

Figure 2.2: Map of the Ghana-Togo Mountain languages, from Kropp Dakubu & Ford (1988), original source Heine (1968).

most likely form separate branches of the Kwa family. Within this classification, Avatime forms a subgroup with Nyangbo, Tafi and Tuwuli and on a higher level also with Ikposo and Ahlo.

Different dialects of Avatime are spoken in the different Avatime villages. Exactly how these dialects differ and how many dialects can be distinguished has not been investigated. The dialect spoken in Vane, where most of my research was conducted, is clearly different from that of the neighboring villages of Amedzofe and Biakpa. The differences I have identified are mostly phonological, for instance, intervocalic *w* in Amedzofe corresponds to *β* in Biakpa and is lost in Vane. There are also some differences in morphological markers (such as aspect/mood markers) and the lexicon.

Avatime has four neighboring languages: closely related Nyagbo and Tafi (Ka-GTM) and more distantly related Logba (Na-GTM) and Ewe (Gbe, Kwa). Nyagbo, Tafi and Logba are minority languages like Avatime; Ewe is the regional lingua-franca. All speakers of Avatime are bilingual in Ewe. Those who have been to school, which includes almost all people under 40 years old, also speak English, which is the national language of Ghana. Avatime is spoken at home, on the street, in the local market, in traditional ceremonies and in public events when no guests from outside are present. Ewe is spoken to people who come from outside the Avatime area but within the Volta Region. The larger regional market is in Ho, in Ewe-speaking territory, so when people travel there to trade, they also speak Ewe. Ewe is also the language of instruction in kindergarten and the first three years of primary school and the language spoken in church. At public events when there are important guests from outside the Avatime area but within the Volta Region, Ewe is spoken. When guests from other places in Ghana are present, the language used is English. English is also used as the language of instruction in the later years of primary school and in high school.

There has been some previous research on Avatime. The oldest source that I have encountered in which the Avatime language is mentioned is Christaller (1888), who compares five Ghanaian languages. Seidel (1898) gives a brief overview of the grammar, some texts and a word list. Ten years after that, Emil Funke, a missionary stationed at Amedzofe, published a grammar sketch of Avatime (Funke, 1909). He also published a word list in 1910 (Funke, 1910). After that, nothing was written on Avatime until the 1960s, when a word list was collected (Kropp, 1967)[2] and Heine (1968) published his comparative study of the Ghana-Togo Mountain languages. In the 1970s, a PhD thesis appeared, describing the Avatime tone system and

[2]Another word list has been found in the archive of the late John Stewart. It is unknown when and by whom it was collected. It can be found on http://www.rogerblench.info.

syntax (Ford, 1971a) and Ford (1971b) provided a brief description of the Avatime noun class system. Avatime is briefly described in Kropp Dakubu & Ford's (1988) chapter on the Central Togo Languages. In the 1990's, the results of a brief field trip to Avatime by Russell Schuh and Ian Maddieson were published. Schuh (1995a) describes the phonology of Avatime, Schuh (1995b) describes the noun class system and Maddieson (1998) discusses doubly-articulated fricatives and vowel harmony. Articles by Francesca Adjei discuss adjectives in Avatime (Adjei, 2007) and temperature terms (Adjei, 2012). In 2009, two MA theses about Avatime were completed, by Rebecca Defina on tense, aspect and mood (Defina, 2009) and by myself on the expression of motion (van Putten, 2009). Publications resulting from these theses are (van Putten, in press) and (Defina, in press). Rebecca Defina is also working towards a PhD thesis on Avatime and has published on serial verb constructions and event segmentation (Defina & Majid, 2012; Defina, 2014a,b). I have published two articles resulting from the work on this thesis (van Putten, 2013, 2014).

2.2 Phonology

2.2.1 Phoneme inventory

The orthography used to represent the Avatime phonemes is based on the Ewe orthography. It is also very similar to the orthography recently developed for Avatime by the Ghana Institute for Linguistics, Literacy and Bible Translation (GILLBT). The most important differences between the present orthography and the GILLBT orthography are the representation of palatal affricates and that of -ATR high vowels. In the GILLBT orthography, the palatal affricates are written */ky/* and */gy/* and the -ATR high vowels are not distinguished from their +ATR counterparts.

2.2.1.1 Consonants

Table 2.1 shows the consonant inventory of Avatime.

The difference between alveolar and palatal affricates has not been recognized in all previous research. Funke (1909), Heine (1968), Ford (1971a) and Kropp Dakubu & Ford (1988) do describe this difference. However, Schuh (1995a) states that there is no difference on the phonemic level. He finds that the use of either set of sounds varies from speaker to speaker, possibly according to generation. I have found that there is a phonemic difference, but this is disappearing from the language. Older speakers make a clear difference between the two sets of sounds and are consistent in which sound is

Table 2.1: Consonant chart. The consonants between brackets only occur in loanwords (of Ewe origin). *ɖ* represents the voiced apical postalveolar stop. Where the orthography differs from the IPA convention, the IPA symbols are given in square brackets.

	bilabial	labio-dental	alveolar	palatal	velar	labial-velar
stop vl	p		t		k	kp
stop vd	b		d, (ɖ)		g	gb
fricative vl	(ʃ [ɸ])	f	s		x	xw [x^w]
fricative vd	ʋ [β]	v	z		h [ɣ]	hw [$ɣ^w$]
affricate vl			ts	tsy [tʃ]		
affricate vd			dz	dzy [dʒ]		
nasal	m		n	ny [ɲ]	ŋ	ŋw [$ŋ^w$]
oral sonorant	w		l/r	y [j]		

used for which word. Younger speakers tend to pronounce all affricates with a palatal place of articulation.

Ford (1971a) claims that Avatime has labial-velar fricatives (*xɸ* and *ɣβ*). However, Maddieson (1998) convincingly shows that phonetically, these sounds are labialized velars rather than doubly articulated fricatives. On the phonemic level they can be considered members of the labial-velar class of sounds, together with the labialised velar nasal and the labial-velar stops.

The alveolar sonorants *l* and *r* are in complementary distribution: *r* occurs only as the second consonant in consonant clusters that start with an alveolar or palatal consonant and *l* is used as a single-consonant onset and in consonant clusters with initial labials, velars and labial-velars. Exceptions to this generalization occur in loanwords and ideophones.

2.2.1.2 Vowels

Avatime has 9 vowels, which are listed in Table 2.2. Like many African languages, Avatime makes a difference between vowels with advanced tongue root (+ATR) and retracted tongue root (-ATR). I use the symbols normally used for open-mid vowels (*ɛ* and *ɔ*) to represent -ATR mid vowels. For the -ATR high vowels I use the symbols *i̱* and *u̱*.

The difference between +ATR and -ATR high vowels seems to be disappearing from the language. The -ATR high vowels are often pronounced as +ATR, especially by younger speakers. There are not many minimal pairs of words with only high vowels solely distinguished by ATR quality, but they do exist. An example of a minimal pair is *kikù* ‘yam’ versus *ki̱kù̱* ‘item made of rubber or plastic’.

Table 2.2: Vowel chart.

	front + ATR	-ATR	central (-ATR)	back +ATR	-ATR
high	i	ɪ̣		u	ʊ̣
mid	e	ɛ		o	ɔ
low			a		

Most Avatime vowels have nasal counterparts, but nasalization is only pronounced word-finally and is often not pronounced at all. Schuh (1995a) finds only three words in the nominal domain and a few verbs with unconditioned nasalization. He concludes that nasal vowels have nearly disappeared from the language. I found clear nasalization on all -ATR vowels: *a* (e.g. *lɪ̣klã̀* 'stone'), *ɛ̣* (e.g. *sɛ̃̀* 'leave'), *ɪ̣* (e.g. *tsyɪ̣̃̀* 'tear'), *ɔ* (e.g. *ɔ̀gɔ̃̀* 'coconut') and *ʊ̣* (e.g. *ɪsʊ̣̃́* 'body'). I did not find any +ATR vowels with clearly audible nasalization, but I did find evidence for (past) nasalization of the vowels *e* and *u*. This evidence comes from the definite articles in noun class 2p and 3s (see Section 2.3.1) which have a nasal consonant when the vowel in the root is nasal. This means the words *ìtsre-nè* 'okra' and *livu-nè* 'nest' must have (had) a nasal vowel in the root. As nasalization does not seem to play an important role in Avatime and it is not always clear whether vowels are nasalized or not, I have decided not to indicate it in the examples in this thesis.

2.2.2 Tone

Avatime has three contrastive level tones: extra high (which I mark as á), high (unmarked) and low (marked à). The low and high tones are the most frequent tones and occur on all types of words and on different affixes. The extra high tone has a limited distribution. It does not occur on noun roots, with the exception of loan words, and it rarely occurs on verb roots. It also rarely occurs on noun class prefixes. There are some verbal prefixes that bear an extra high tone. The extra high tone is often the result of tone raising, a process that will be described in Section 2.2.4. Some minimal pairs distinguishable only by tone can be seen in (1)

(1) a. *ní* 'locative preposition'
ni 'put off (fire)'
nì 'and/with'

b. *sɪ̣yà* 'hair'
sɪ̀yà 'language'

Contour tones on a single vowel usually result from the realization of a floating tone on a syllable or from merged syllables. When this is not the case, contour tones usually occur on long vowels, in which case they can be analyzed as two identical vowels with different tones following each other. There are two exceptions: the conjunction *lɛ̌* and the habitual / recurrent prefix *zɛ̌*, both of which have a rising tone.

Previous work on Avatime has identified four tones: low, mid, high and extra high (Ford, 1971a; Schuh, 1995a). Ford (1971a) describes the mid tone as rare yet clearly different from the other tones. This is confirmed by Schuh (1995a), although he does note that he found it difficult to hear the difference between the mid tone and the high tone and that speakers do not always seem to make a difference. I describe the Avatime tone system with three tones only, as I have not found any instance of the mid tone identified in previous literature. I have checked all words that have been mentioned in previous literature as bearing a mid tone with six consultants and none of them produced any mid tones. The words were elicited both in isolation and in sentences and if possible both followed by a low tone and followed by a high tone.

2.2.3 Root and syllable structure

Most Avatime roots are monosyllabic. Noun roots that are not monosyllabic are usually loan words. There is a fair number of disyllabic verb roots, but the second syllables of many of these verbs seem to have been suffixes in an earlier stage of the language.

Syllables can have the following structures: V (word-initially, as in *ɔka* 'father' or as the second syllable in a root as in *wa.i* 'play'), CV (as in *li-gbo* 'chair'), CVN (where N is a nasal, only in particles and ideophones such as *bóŋ* 'rather'), and CCV (as in *trɛ* 'go'). The second consonant of CCV syllables can only be an oral sonorant.

At first sight, it seems like there are also CVV syllables. However, there are good reasons to assume that CVV syllables are at best marginal or likely absent from the language. There are syllables that seem to have an underlying vowel which is realized as a glide. An example is *ɔ-mɔɛ* 'orange', where the *ɔ* preceding *ɛ* is realized as a glide. As also noticed by Schuh (1995a), the vowel quality of the original vowel seems to be maintained in the glide. Because of this, I write these roots as vowel sequences, even though they are realized as CCV syllables. There are also a number of roots that seem to have a CVV structure but which are better analyzed as having a bisyllabic CV.V structure. These are roots such as *ka-sɔi̯* 'basket' and *gléè* 'fall'. The main reason for analyzing these roots as bisyllabic is that they correspond

to CVCV structures in other dialects of Avatime: *kasɔ̀ị̀* in Vane is *kasɔwị̀* in Amedzofe and *gléè* corresponds to *gléwè* in Amedzofe. It is thus likely that intervocalic *w* has been lost in Vane. Finally there are some prefixes that seem to have a CVV structure, such as the subject prefixes in the potential mood and the progressive aspect and the noun class prefixes on numerals such as *tia-bà* 'two'. Some of these have clearly resulted from a fusion of two prefixes and could historically be analyzed as bisyllabic. However, there is no clear synchronic evidence for either analysis.

2.2.4 Phonological processes

2.2.4.1 Vowel harmony

Avatime has a system of vowel harmony based on the advanced versus retracted tongue root distinction (+ATR versus -ATR, see also Section 2.2.1). Prefixes and suffixes are underspecified for ATR value. Prefixes harmonize with the first root vowel and suffixes harmonize with the last root vowel. There are five vowel harmony pairs, which I represent with capital letters in this thesis: I = i/ị, U = u/ụ, E = e/ɛ, O = o/ɔ and A = e/a. Some examples of vowel harmony can be seen in (2), (3) and (4) below. The vowel *e* occurs in two pairs, which is likely the result of the loss of a central +ATR vowel that formed a harmony pair with *a* in the past and got replaced with *e*. The e/a vowel harmony pair has a limited distribution: it only occurs in person and noun class prefixes (see the prefix in (4)). In suffixes and aspect/mood/directionality prefixes, the vowel *a* does not harmonize with the root (see the suffix in (4)).

(2) a. ***o**-nu* *ɔ́-dzɛ*
C$_{1s}$.SBJ-be C$_{1s}$-woman
'She is a woman.' (contrexp05_s2_120831)

b. *ɔ-lí* *ní* *lị-gba-lɛ* *mɛ̀*
C$_{1s}$.SBJ-be.at LOC C$_{3s}$-room-DEF inside
'She is in the room.' (contrexp07_s4_120831)

(3) a. ***lị**-gba-**lɛ̀***
C$_{3s}$-building-**DEF**
'the building'

b. ***li**-gbo-**lè***
C$_{3s}$-chair-**DEF**
'the chair'

(4) a. ***ba**-nɔ̀-**a***
C$_{1p}$-person-**DEF**
'the people'

b. ***be**-bi-**à***
C$_{1p}$-child-**DEF**
'the children'

2.2.4.2 Tone raising

Another common phonological process in Avatime is tone raising. This phenomenon was first described by Ford (1971a). Low and high tones can be of two types: tones which Ford calls stable which do not undergo raising and tones that are unstable and undergo raising in certain contexts. In this section I will focus on tone raising in verbs, but it also occurs in nouns.

In the aorist aspect, when a verb root with an unstable tone is followed by a syllable with a high or extra high tone, the unstable tone is raised from low to high or from high to extra high. If the tone on a verb root is raised from low to high, the tone on the prefix becomes extra high. This is shown in example (5).

(5) a. Low tone followed by low tone (no raising):

*m**a**-ŋ**à*** *blàli-e*
1s.SBJ-eat plantain-DEF
'I ate plantain.'

b. Low tone followed by high tone (raising on root and prefix):

*m**á**-ŋ**a*** *kị̀-mịmị̀-è*
1s.SBJ-eat C$_{4s}$-rice-DEF
'I ate rice.' (RS0809022)

In the progressive aspect and negative aorist and progressive, low tones do not undergo raising, as is shown in example (6).

(6) a. Low tone in positive aorist (raising):

*á-t**a*** *ki-dzya-è* *kivoe*
C$_{1s}$.SBJ-chew C$_{4s}$-meat yesterday
'He ate meat yesterday.'

b. Low tone in negated aorist (no raising):

*ɔ́-t**à*** *ki-dzya-è*
C$_{1s}$.SBJ.NEG-chew C$_{4s}$-meat-DEF
'He did not eat meat.'

c. Low tone in progressive (no raising):

èɛ́-tà *ki-dzya-è*
C_{1s}.SBJ.PROG-chew C_{4s}-meat-DEF
'He is eating meat.' (elic-verbtone_100717_DQ)

For the potential and intentive moods, I have conflicting evidence: some consultants raise low tones and others do not.

Unstable high tones are raised to extra high when they are followed by a high tone. This can be seen in (7).

(7) a. High tone followed by low tone (no raising):

kị-tɔ *blàli-e*
1p.SBJ-cook plantain-DEF
'We cooked plantain.' (RS0809022)

b. High tone followed by high tone (raising):

kị-tɔ́ *kị-mịmị-è*
1p.SBJ-cook C_{4s}-rice-DEF
'We cooked rice.' (RS0809021)

Verbs with unstable high tones fall into two classes depending on when tone raising occurs. One class of verbs shows tone raising in the same aspects, moods and polarity as the low tone verbs discussed above. This class is also characterized by raising of tones on subject prefixes. An example can be seen in (8).

(8) a. High tone in positive aorist (raising):

é-dzɛ́ *li-nyi-nè*
C_{1s}.SBJ-forget C_{3s}-name-DEF
'She forgot the name.'

b. High tone in negated aorist (no raising):

ó-dzɛ *li-nyi-nè*
C_{1s}.SBJ.NEG-forget C_{3s}-name-DEF
'She did not forget the name.' (elic-SIS-tone_100708_MiA)

The other class of verbs shows tone raising when followed by a high tone in all aspects and moods and when negated. The tones on the subject prefixes of these verbs are not raised. An example is shown in (9).

(9) a. High tone in negated aorist (raising):

ɔ́-tɔ́ *kị-mịmị-è*
C_{1s}.SBJ.NEG-cook C_{4s}-rice-DEF
'She did not cook rice.'

b. High tone in progressive (raising):

èɛ́-tɔ́ *kị-mịmị-è*
C_{1s}.SBJ.PROG-cook C_{4s}-rice-DEF
'She is cooking rice.' (elic-verbtone_100708_AB)

2.2.4.3 Vowel sequences

Previous research has found that vowel sequences are not allowed in Avatime (Schuh, 1995a). This research was based on the Amedzofe dialect and found that vowel sequences are always avoided by insertion of a glottal stop, eliding one vowel or changing a high or mid vowel to a glide.

The Vane dialect, unlike the Amedzofe dialect, does allow vowel sequences in words such as *tae* 'a little' (see Section 2.2.3). The words which have vowel sequences in the Vane dialect usually have a sonorant such as *w* or *ʋ* (*β*) in between the two vowels in other dialects of Avatime.

Nevertheless, the three strategies of avoiding vowel sequences mentioned by Schuh are also used in Vane. Across word boundaries, both insertion of a glottal stop and elision occur. An example of elision across word boundaries can be seen in (10). Glide formation across word boundaries is rare. Within words, vowel deletion and glide formation are both common strategies.

(10) [efekehɛ]

e-feke *ìhɛ*
C_{1s}.SBJ-lift knife
'He picked up the knife.' (expnew15 15)

When vowel elision takes place, the tendency is for the highest vowel of the two to be deleted, as in (10) above. Some vowels seem to be privileged and do not get deleted even if they are the highest vowel of the two. This is the case with serial verb markers (see Section 2.7.4).

2.3 The noun phrase

The word order of the Avatime noun phrase can be seen in (11).

(11) noun - adjectives - numeral - determiner - particle

An example of a noun phrase with all these slots filled can be seen in (12).

(12) *e-boe* *kpekpe* *ta-ta=là* *kò*
C_{3p}-matter short C_{3p}-three=DEF only
'only the three short matters' (kadzidzia_110409_AB_2)

In the remainder of this Section, I discuss the Avatime noun class system, the different nominal modifiers, possessive constructions, conjoined noun phrases and personal pronouns.

2.3.1 Nouns and noun classes

Avatime is like many other Niger-Congo languages in that it has noun classes. Every noun consists of a stem and a noun class prefix indicating gender and number. The noun class system of Avatime has been described in quite a lot of detail by Schuh (1995b). What I have found seems to agree mostly with Schuh's description.

Avatime has seven genders, six of which consist of singular and plural noun classes and one of which is for mass nouns. Unlike the system in many other Niger-Congo languages (especially Bantu), the singular-plural pairings in Avatime are very regular: nouns with identical singular prefixes almost always also have identical plural prefixes and vice versa. This is reflected in the numbering system I have adopted for the noun classes. In this system, the genders are numbered and singular and plural are indicated with s and p. The numbers are taken from Heine (1968). Some examples of singular and plural nouns can be seen in (13).

(13) *ɔ́-dzɛ* 'woman' *bá-dzɛ* 'women'
ɔ̀-mà 'town' *ì-mà* 'towns'
li-gbo 'chair' *e-gbo* 'chairs'
kụ-ka 'fence' *bà-ka* 'fences'

Several nominal modifiers agree in noun class with the head noun (see also Section 2.3.2). An overview of the noun class prefixes and the forms of the agreement markers can be seen in Table 2.3. The tones on the definite articles are not marked in this table as they depend on the tone of the preceding syllable. The tones on the indefinite articles and numerals depend on the tone of the noun class prefix on the head noun (see Section 2.3.2).

Some noun class prefixes always bear a low tone, these are marked in Table 2.3 with a low tone. The tone on the prefixes in the other classes is

Table 2.3: Noun classes. Capital vowels refer to vowel harmony pairs (see Section 2.2.4). Capital L is realized as *n* when the preceding syllable contains a nasal consonant or vowel, otherwise it is realized as *l*.

noun class	prefix	def. article	demonstrative	indef. article	numeral	pronoun
1 s	O-/Ø	-(y)E	líyè / lɛ́-lɔ̀	ɔ-tɔ	to-le 'one'	yɛ
1 p	bA-/Ø	-a	bá-yà / bá-lɔ̀	a-tɔ	tịa-ba 'four'	ba
2 s	Ò-	-LO	lɔ́-	ɔ-tɔ	to-	lɔ
2 p	Ì-	-LE	lɛ́-	ị/ɛ-tɔ	tI-	lɛ
3 s	lI-	-LE	lɛ́-	ɛ-tɔ	ti-	lɛ
3 p	A-	-La	lá-	a-tɔ	tA-	la
4 s	kI-	-(y)E	kɛ́-	ị/ɛ-tɔ	ti-	kɛ
4 p	bI-	-E	bɛ́-	ị/ɛ-tɔ	tU(I)-	bɛ
5 s	kU-	-O	kɔ́-	ɔ-tɔ	tu-	kɔ
5 p	bÀ-	-a	bá-	a-tɔ	tIA-	ba
6 s	kA-	-a	ká-	a-tɔ	ti-	ka
6 p	kÙ-	-O	kɔ́-	ɔ-tɔ	tU-	kɔ
7	sI-	-sE	sɛ́-	ɛ-tɔ	ti-	sɛ

lexically determined, but the prefixes of class 1 singular and plural cannot bear a low tone. Extra high tones on prefixes are rare and have only been found (both by me and by Schuh (1995b)) in classes 1, 3 and 4 singular and plural and 5 singular. Prefixes with all different tones can be seen in (13). Example (14), repeated from (1), shows that the tone on the prefix can be the only way to distinguish between words.

(14) *sị-yà* 'hair'
sì-yà 'language'

There are three pairs of noun classes that only differ from each other in tone: 1s & 2s, 1p & 5p, and 5s & 6p. The first two of these pairs are always distinct, as 1s and 1p never have low tones and 2s and 5p never have high or extra high tones. The pairs 5s and 6p cannot always be kept distinct, as the 6p prefix always has a low tone, but 5s may also have a low tone[3].

There are some roots that can occur in multiple noun classes with altered meanings. Some examples can be seen in (15).

[3]Another way to analyze these noun classes is to treat the nouns with a low tone prefix in class 5s as belonging to class 6p and posit an eighth gender which pairs singular nouns of class 6p with plural nouns of class 5p. As such an analysis increases the number of genders and disturbs the transparent naming system (having singular items in a 'plural' class) I do not adopt it in this thesis.

(15)

ɔ̀-se 'tree'	*kì-se* 'stick'
kụ-lị 'palm tree'	*lị-lị* 'palm fruit'
ɔ-nù̱vɔ̀ 'child'	*kụ-nù̱vɔ̀* 'youth'
lị-klami 'small stone'	*sị-klami* 'sand'
ɔ̀-wla 'arm'	*ka-wla* 'hand'

There are some patterns to the meaning changes. Class 6s (*kA-*) can be used to form diminutives and class 7 (*sI-*) is used to make a count noun into a mass noun. Some less productive regularities are class 3s (*lI-*) being used for fruits and class 5s (*kU-*) for abstract concepts.

2.3.2 Nominal modifiers

2.3.2.1 Adjectives

Avatime adjectives are classified as such by their position within the NP, directly following the noun (or another adjective) and their lack of agreement with the head noun (as opposed to most other nominal modifiers). Ideophones are frequently used as adjectives (see Section 2.6.1). Some examples of ideophonic adjectives are *plɔplɔ* 'soft', *pititi* 'white' and *tsyịmịtsyịmị* 'sweet'.

The class of non-ideophonic adjectives consist of a small group of non-derived adjectives and a number of adjectives which have a reduplicated structure, making them look like they are derived from verbs. The non-derived adjectives that I have found are *gba* 'good', *bìdi* 'big' and *sịsàmi* 'small'.[4] An example can be seen in (16).

(16)

ɔ̀-nyɔ	*mɛ̀*	*dzɛ-dzɛ*	*ɔ̀-nu*	*ki-dɔ̀*	***gba***
C_{2s}-farm	inside	RED-go	C_{2s}.SBJ-be	C_{4s}-thing	**good**

'Farming is a good thing.' (conv-greenhouse_110408_SO-ViA)

Verbs can be turned into adjectives by reduplication. This can be seen in (17), where (a) shows the verb *kpa* and (b) shows the adjective *kpakpa*.

(17)

a. *bi-tá-kpa*
C_{4p}-INT-dry
'they will dry'

b. *a-wlakpa kpa-kpa = là*
C_{3p}-leaf RED-dry = DEF
'the dry leaves'

[4] In fact, *sìsàmi* looks like it has evolved from a noun, as *si-* is a noun class prefix and *-mi* can be added to some nouns to form a diminutive.

A number of adjectives have a reduplicated structure without a corresponding verb. Some examples are *vuvu* 'new' and *wɔwɔ* 'green/fresh' (there are no verbs **vu* or **wɔ*). These adjectives may have been formed from verbs which have disappeared from the language.

Several adjectives have corresponding stative verbs, which express the same meaning but are not related in form. Some examples are *kemè* 'be big', *pɛ̀* 'be good' and *lɔsì* 'be black', which are the counterparts of *bìdi* 'big', *gba* 'good' and *kpì̩kpì̩* 'black'. An example of the use of *pɛ̀* 'be good' can be seen in (18) (compare to the use of the adjective *gba* in (16) above). Adjectives which do not have a verbal counterpart can be used predicatively in a copula construction with the verb *lí̩* 'be at' (19).

(18) *kù-da* *kɛ-tá-**pɛ̀***
C5s-drink C5s.SBJ-INT-**be.good**
'The drink will be good.' (conv-ablorme_100715_SO-AS)

(19) *yɛ* *ke-plikpà* *ka-lí̩* ***sì̩sàmi***
C1s C6s-book C6s.SBJ-be.at **small**
'His book is small.' (contrexp15_s4_120909)

Adjectives can be nominalized by prefixing them with a noun class prefix. This can be seen in (20) where the adjective *sìsàmi* 'small' is prefixed with the class 1 singular prefix *O-*, resulting in the meaning 'the small one'.

(20) *ó-nyime* *e-ni* *cándle* *bìdi=yè* *lɛ̌* *ɔ́-dzɛ* *a-sụ* *ɔ-sìsàmi-e*
C1s-man C1s.SBJ-put.off candle big=DEF and C1s-woman C1s.SBJ-light **C1s-small-DEF**
'The man blew out the big candle and the woman lit the small one.'
(contrexp31_s4_120913)

Some adjectives can be reduplicated to intensify them, as in (21).

(21) *ke-plikpà* ***bìdi*** ***bìdi*** *á-tɔ* *ká-tiní* *ɔ̀-kplɔ-nɔ̀* *abà*
C6s-book **big** **big** C6s-INDF C6s.SBJ-be.on:LOC C2s-table-DEF on
'A very big book is on the table.' (contrexp19_s3_120909)

2.3.2.2 Numbers

Table 2.4 shows the cardinal numbers one to ten. The numbers one to nine show noun class agreement. The numbers one to seven have a prefix *o-* when

Table 2.4: Number words.

-le	one
-bà	two
-ta	three
-ne	four
-tsu	five
-glò	six
-glòele	seven
ɔ̀gɔtV(V)bà	eight
ɔ̀gɔtV(V)le	nine
liɔfɔ̀	ten

used in isolation for counting, but when used within the noun phrase they have a prefix *tV(V)-*, where the vowels are determined by the noun class of the head noun (see Table 2.3 in Section 2.3.1). The numbers eight and nine show these agreeing vowel(s) in their third syllable.

The numbers one to six have monosyllabic roots, whereas seven, eight and nine are compositional. The word *glòele* 'seven' consists of *glò* 'six' and *le* 'one'. The words for eight and nine consist of the verb *gɔ* 'remain', inflected for class 2 singular (ɔ̀-) followed by *tV(V)bà* 'two', in the case of eight and *tV(V)le* 'one', in the case of nine. Literally, the numbers eight and nine can thus be translated as 'two remain' and 'one remains'.

The numbers twenty to ninety consist of the form *avì* followed by the numbers two to nine, inflected as in class 3 plural, e.g. *avìtabà* 'twenty', *avìteglòele* 'seventy', *avìɔ̀gɔtabà* 'eighty'. Hundred is *alafa*, borrowed from Arabic *alf* 'thousand', probably via Ewe. Thousand is *àkpe*, borrowed from Ewe.

To form composite numbers, the coordinator *(a)nì* is used, as in *avìtene nì tiabà* 'forty-two'. An example of a more complex number in use can be seen in (22).

(22) *ki-nu* *cedi* *àkpe* *alafa* *tia-ta* *nì* *avìteglò*
C_{4s}.SBJ-be cedi thousand hundred C_{1p}-three and sixty
'It is three hundred and sixty thousand (360,000) cedis.'
(tribunal_100513_4)

Within the noun phrase, number words follow adjectives and precede demonstratives and determiners. This can be seen in (23), repeated from (12).

(23) *e-boe* *kpekpe* ***ta-ta*** = *là* *kò*
C_{3p}-matter short **C_{3p}-three** = DEF only
'only the three short matters' (kadzidzia_110409_AB_2)

2.3.2.3 Demonstratives

Demonstratives follow the noun and any adjectives and numbers. There is a proximal demonstrative *yà* and a distal demonstrative *lɔ̀*. Examples can be seen in (24) and (25).

(24) *trɛ* *ní* *ke-pé* ***ké-ya*** *mɛ̀*
go LOC C_{6s}-house **C_{6s}-PROX** inside
'Go to this house.' (kadzidzia_110409_AB_1)

(25) *mà-pɛ* *sị̀* *li-bó* ***lé-lɔ̀*** *kɔ* = *ɛ*
1s.SBJ-want COMP C_{3s}-matter **C_{3s}-DIST** CTR1 = CM
lí-kí-dó *ɔ-nɛnɛ* *kù-sùsu* *mɛ̀*
C_{3s}.SBJ.NEG-PROH-move.out:LOC C_{1s}-anybody C_{5s}-thought inside
'I want that matter not to leave anybody's mind.'
(chiefs-meeting_100619_3)

Demonstratives show noun class marking which agrees with the head noun (see Section 2.3.1). The prefix on the demonstrative always bears an extra high tone and the last syllable of the word preceding the demonstrative also gets an extra high tone. Demonstratives with a noun class prefix can be used as nominals, such as *kɔ́ya* 'this one' in (26).

(26) ***kɔ́-yà*** *kɔ* *aní* *akpɛtɛshí* *lo*
C_{5s}-PROX CTR1 NEG akpeteshi FP
'As for this one (drink), it is not akpeteshi.' (conv-rice_110411_3-3)

2.3.2.4 Articles

Avatime has a definite and an indefinite article. The definite article is widely used and is often added to nouns in isolation. The indefinite article has a specific indefinite interpretation, comparable to English 'some' or 'a certain'. To get a non-specific indefinite interpretation, the bare noun is used. Both the definite and the indefinite article follow the noun and any adjectives and numerals.

The definite article is a single syllable, which can have a CV or a V structure. The realization is dependent on the noun class of the head noun (see

Table 2.3 in Section in Section 2.3.1). The definite article bears polar tone: when the preceding tone is low, it is high and when the preceding tone is high or extra high, it is low. The vowel of the article harmonizes with the previous syllable. When the definite article is realized as a single vowel, it either forms a vowel sequence with the final vowel of the preceding word or assimilation takes place by which the final vowel completely assimilates to the article (see Section 2.2.4 for more information about what happens with vowel combinations). Example (27) shows nouns with and without a definite article and (28), repeated from (12), shows a definite article in a longer noun phrase.

(27)

libì + lE	[libìle]	'the wound'
kụlị + O	[kulị̀]	'the palm tree'
balị + a	[balaà]	'the palm trees'
ónyime + E	[ónyimeè]	'the man'

(28)

e-boe	*kpekpe*	*ta-ta* = ***là***	*kò*	
C_{3p}-matter	short	C_{3p}three = DEF	only	
'only the three short matters'				(kadzidzia_110409_AB_2)

The indefinite article has the root *tɔ* with a prefix that consists of a single vowel, which agrees with the noun class of the head noun (see Table 2.3 in Section 2.3.1). This leads to a vowel sequence, which is often avoided by complete assimilation of one of the two vowels to the other (see also Section 2.2.4). This can be seen in (29).

(29)

lịkla + *étɔ*	[liklɛétɔ] 'a certain stone'
ɔ́dzɛ + *ɔ́tɔ*	[ɔ́dzɔɔ́tɔ] 'a certain woman'
kùdze + *ɔ̀tɔ*	[kudzeètɔ] 'a certain rat'

The tone of the prefix depends on the tone of the prefix on the noun. If this is low, the tone on the prefix on the indefinite article is also low. Otherwise, the tone on the prefix is extra high. This can be seen in (29) above.

The indefinite article *tɔ* can be prefixed with the full noun class prefix that occurs on nouns to make it into an indefinite pronoun. An example can be seen in (30).

(30)

1	*kù-dze-ò*	*kụ̀-lí*	*yà*	*gbị*	
	C_{6p}-rat-DEF	C_{6p}.SBJ-be.at	here	be.many	
	'There are many rats here.'				
2	*wɔ-mɔ̀*	***kù-tɔ***			
	2s-see	C_{6p}-INDF			
	'Did you see some?'				(elic-numerals-indef_120903_PKD)

2.3.2.5 Particles

There are a number of particles which can occur at the end of the noun phrase, following all other modifiers. These kinds of particles have been called intensifiers in previous literature (see e.g. Ameka, 2006). They have different functions such as quantifying, restricting and contrasting. Some of them can function as focus particles or as clause-final particles. Some examples are *petee* 'all', *bóŋ* 'rather', *tsyɛ* 'also', *kò* 'only/just' and *tututu* 'exact'. An example of the particle *tsyɛ* can be seen in (31).

(31) *ɔ-nı̀vɔ̀ sı̀sàmi=ítɔ* ***tsyɛ*** *ɔ-lí́ ke-pe-a mɛ̀*
C_{1s}-child small=INDF **ADD** C_{1s}-be.at:LOC C_{6s}-house-DEF inside
'A certain small child was also in the house.'
(famprob_110401_MeD-BeK_story)

It is possible for multiple particles to occur within one noun phrase (32).

(32) *lɛ̌ mɛ sı̀ lı̀-vlɛ-lɛ̀* ***tete*** ***bòŋwí*** *tɔ*
and 1s say C_{3s}-morning-DEF **only** **rather:FOC** PURP
mí-panì=ye
1s.SBJ.SBJV-greet=C_{1s}.OBJ
'And I said I would rather go and greet her only in the morning.'
(conv-funeral_100528_7-1)

A subset of the particles mentioned in this section will be discussed in more detail later in this thesis. Chapter 5 discusses a set of contrastive particles and Chapter 6 discusses the additive particle *tsyɛ*.

2.3.3 Possessive constructions

A difference is made between alienable and inalienable possession. The latter is used when the possessum is a kinship term and the former with all other kinds of possessums (including body parts, which in many other languages are treated as inalienably possessed).

Alienable possession is indicated by juxtaposition, with the possessor preceding the possessum. The possessor can be a noun or a pronoun. The regular independent pronouns are used as possessive pronouns (see Section 2.3.5). Examples can be seen in (33), which shows noun phrases as possessors and (34), which shows pronominal possession. The examples also show that possession of body parts counts as alienable possession.

(33) a. *ɔ-gá* *lɛ́-lɔ̀* *a-sia-nà*
C$_{1s}$-animal C$_{1s}$-DIST C$_{3p}$-horn-DEF
'the horns of that animal' (frog_100719_DQ-PhA)

b. *ɔ-nù̩vɔ̀-ɛ* *li-kuto-lè*
C$_{1s}$-child-DEF C$_{3s}$-hat-DEF
'the child's hat' (pear_100719_PhA-DQ)

(34) a. *yɛ* *ò-nugu*
C$_{1s}$ C$_{2s}$-mouth
'his mouth' (kadzidzi-crocodile_PKD_20110924)

b. *yɛ* *ɔ̀-mà-nɔ*
C$_{1s}$ C$_{2s}$-town-DEF
'his town' (chiefs-meeting_100619_03)

Inalienable possession is used for possessed kinship terms. In these cases, the possessor pronoun fuses with the noun class prefix of the possessum. This can be seen in (35).[5]

(35) a. *yɛ* + *one* –> *yene* 'his mother'

b. *blɔ* + *bakà* –> *blakà* 'our fathers'

This fused possessor pronoun is also present in possessed kinship terms with a nominal possessor (36).

(36) *awu* ***ye-ne***
Awu **C$_{1s}$.POSS:C$_{1s}$**-mother
'Awu's mother' (conv-funeral_100528_7-1)

To pronominalize the possessum, the root *nɛ* is used, which is marked with a prefix for the noun class of the possessum (37).

(37) *kị-bɔ́* *kɛ́-yà* *wɔ* ***kị-nɛ***
C$_{4s}$-money C$_{4s}$-PROX 2*s* **C$_{4s}$-POSM**
'This money is yours.' (elic-possessives_120906_PKD)

[5]Note that through the common strategies for avoiding vowel sequences, it is possible for the vowel of the pronoun or the first vowel of the noun in examples such as (34) to be deleted too. However, this is optional and either of the vowels could be deleted. In the case of inalienable possession, it is always the same vowel that is deleted and moreover, fusion also takes place when the noun class prefix starts with a consonant, as in (35b).

2.3.4 Conjoined NPs

Noun phrases can be conjoined by using the conjunction/preposition *(a)nì* 'and/with'. An example of conjoined nouns can be seen in (38).

(38) *ɔ́-dzɛ* ***nì*** *ó-nyime* *ba-dí* *ke-se-à*
C$_{1s}$-woman **and** C$_{1s}$-man C$_{1p}$.SBJ-sit:LOC C$_{6s}$-ground-DEF
'The woman and the man sat down.' (contrexp05_s2_120831)

Examples (39) and (40) show *(a)nì* used as a preposition.

(39) *á-ŋa* *bi-dɔ̀mɛ* ***nì*** *gàtsyie*
C$_{1s}$.SBJ-eat C$_{4s}$-thing **with** spoon
'She ate something with a spoon.' (elic-QUIS-foc_100714_SO)

(40) *lɛ̌* *ɔ̀-lagɔ̀-lɔ = ɛ* *kíà-klanì* *ì-mà-nɛ*
and C$_{2s}$-evening-DEF = CM 1p.SBJ.POT-move.around C$_{2p}$-town-DEF
mɛ̀ ***nì*** *blɔ* *bòsòmi-à*
inside **with** 1p candle-DEF.p
'And in the evening we will walk around the town with our candles.'
(chiefs-meeting_100619_03)

2.3.5 Personal pronouns

Avatime has one main set of independent pronouns, which are used in both subject and object positions and as possessive pronouns. Distinctions are made between first person singular and plural, second person singular and plural and pronouns for each noun class. When referring to people, the pronouns from class 1 singular and plural are used. The pronouns for the noun classes can be seen in Table 2.3 in Section 2.3.1. Table 2.5 shows the first and second person pronouns.

When used in subject position or as possessive pronouns, the pronouns occur in the forms cited in the tables. This can be seen in (41) for a subject pronoun and in (42), repeated from (34) for a possessive pronoun.

Table 2.5: First and second person pronouns.

	singular	plural
first person	mɛ	blɔ
second person	wɔ	mlɔ

(41) ***mlɔ*** *tsyɛ* *mlɛ-tá-tsì*
2p ADD 2p.SBJ-INT-grow
'You too, you will grow up.' (kadzidzi_ET_20110827_2)

(42) ***yɛ*** *ò-nugu*
C_{1s} C_{2s}-mouth
'his mouth' (kadzidzi-crocodile_PKD_20110924)

When the pronouns are used as object pronouns, they cliticize to the verb and vowel harmony takes place, so if the verb ends in a +ATR vowel, the vowel of the object pronoun will change to its +ATR counterpart (except if the vowel is *a*, in which case it remains *a*). This is shown in (43). In (43a), the object pronoun follows a verb with a final +ATR vowel and in (43b), the object pronoun follows a verb with a final -ATR vowel.

(43) a. *àfua* *é-te*=***me***
Afua C_{1s}.SBJ-know=1s.OBJ
'Afua knows me.'
b. *àfua* *a-xwa*=***mɛ***
Afua C_{1s}.SBJ-call=1s.OBJ
'Afua called me.' (elic-tone2-names-enclitics_120904_SO)

2.4 Locative phrases

Locative phrases can be used as adjuncts, indicating the location at which something happens, or as oblique arguments with certain verbs of location, motion and placement. Locative phrases consist of a preposition *ní*, followed by a noun (phrase) or postpositional phrase. The preposition *ní* indicates the locative relation, the noun (phrase) indicates the reference object and the postposition indicates the search domain. The search domain is the exact part (inside, upper surface, outer surface etc.) of the reference object where something is located (see e.g. Ameka, 1995).

The preposition *ní* is often elided outside careful speech. When this happens, the extra high tone of *ní* is attached to the previous word, as can be seen in (44). Example (44a) shows a locative phrase with overt *ní* and in (44b) the locative marker *ní* is elided, changing the high tone on the verb *trɛ* to a rising tone from high to extra high.[6]

[6]In this thesis, the syllable preceding elided *ní* will be transcribed as if bearing an extra high tone rather than specifying the particular rising tone.

(44) a. *a-**trɛ*** ***ní*** *ke-pe-a* *mɛ̀*
C_{1s}.SBJ-**go** **LOC** C_{6s}-house-DEF inside
'He went home.' (S0811171_WO)

b. *a-**tré*** *ke-pe-a* *mɛ̀*
C_{1s}.SBJ-**go:LOC** C_{6s}-house-DEF inside
'He went home.' (S0811171_WO)

There are five postpositions in Avatime: *mÈ* 'inside', *abà* 'on', *ese* 'under', *nu* 'at the opening' and *sụ* 'near/next to'. Most of these are derived from nouns. The only postposition which does not seem to be derived from a noun is *mÈ* 'inside', which is likely borrowed from Ewe. This postposition is always preceded by a floating high tone and its vowel harmonizes to the preceding vowel (see Section 2.2.4 on vowel harmony). The postposition *nu* might also have been borrowed from Ewe, or it could have derived from *ònugu* 'mouth'. The postpositions *abà* and *ese* have corresponding nouns *kabà* 'top' and *kese* 'ground'. The difference between the postpositions and nouns is that the first consonant of the noun class prefix is removed in the postposition and the postposition cannot occur with a definite article. The postposition *sụ* 'near/next to' derives from the noun *ịsụ* 'body'. An example of the postposition *mÈ* can be seen in (44) above. Example (45) shows the postposition *abà*.

(45) *ó-nyime-è* *ɔ́-tịnį́* *lị̀-klakpɔ-lɛ̀* ***abà***
C_{1s}-man-DEF C_{1s}.SBJ-be.on:LOC C_{3s}-ant.hill-DEF **top**
'The man was on the ant hill.' (frog_SO)

Instead of postpositions, nouns can also be used to indicate the search domain. These nouns occur in the same slot of the locative phrase as postpositions. Some examples of nouns which can be used in this way are *ɔ̀tɔ̀nɔ* 'front', *kede* 'back' and *kapɛ* 'side'. An example of the use of *kede* 'back' can be seen in (46). This example also shows that these search-domain indicating nouns differ from postpositions in that they can occur with a definite suffix.

(46) *xé* *gì* *ma-dɔ́* *ò-hu-lɔ̀* ***ke-de-à***
when REL 1s.SBJ-move.from:LOC C_{2s}-car-DEF **C_{6s}-back-DEF**
mí-tsyí *ple*
1s.SBJ.SBJV-turn descend
'When I come from behind the car, I should turn downwards.'
(lego_KA-RE)

When the noun (phrase) already indicates a location, for instance if it is a place name, no postposition or other indication of search domain is used, as can be seen in (47).

(47) *mà-trɛ ní Amedzofe*
1s.SBJ-go LOC Amedzofe
'I went to Amedzofe.' (S0811111_WO)

Deictic reference to a location is made using the words *níyà* 'here' and *nílɔ̀* 'there' (alternative variants of the latter are *níkɔlɔ̀*, *níklɔ̀* and *níwlɔ̀*). These words seem to consist of the preposition *ní* attached to the roots *yà* and *lɔ̀* respectively, which are identical to the demonstratives (see Section 2.3.2). The alternative forms *níkɔlɔ̀*, *níklɔ̀* and *níwlɔ̀* indicate that the origin of this word is likely in the noun *ɔ̀kɔ* 'place', which, with the definite article attached is *ɔ̀kɔlɔ̀*.

Even though *níyà* and *nílɔ̀* already contain the form *ní*, they are almost always marked with the locative preposition *ní* when they are used as oblique arguments or adjuncts in a position after the verb. This can be seen in (48).

(48) *bíà-kɔ nya **ní** **níyá** te*
C_{1p}.SBJ.POT-take tie LOC here like.this
'They will tie it here like this.' (illness_100616_SO-DS)

Their use as objects of the preposition *ní* seems to indicate that *níyà* and *nílɔ̀* are nouns and not adverbs. Other properties that show their nominal status are that they can be used as subjects (49) and objects (50) of verbs and can head relative clauses (50).

(49) ***nílɔ̀** ɛ-dra*
there C_{2s}.SBJ-be.clean
'That place is clean.' (fix-iron_PKD_20110925)

(50) *lɛ̌ kíà-kɔ lụlɔ̀ **nílɔ̀** gì kí-ŋa li-wè-le*
and 1p.SBJ.POT-take clean there REL 1p.SBJ-eat C_{3s}-day-DEF
'And we will use it to clean the place where we celebrated the festival (literally: ate the day).' (chiefs-meeting_100619_03)

When *níyà* and *nílɔ̀* occur in sentence-initial position, they are usually not preceded by *ní*, as can be seen in (51). This is not surprising, as nominal constituents are allowed in this position (see Chapter 4).

(51) *pɔ̀ **nílɔ̀** bí-zɛ̌-kpɛ tùkpa wlíwli-à*
but there C_{1p}.SBJ-HAB-put.in bottle small-DEF.p
'But there they put it in small bottles.' (conv-street_100720_2)

2.5 Verbs

Verbs in Avatime are obligatorily marked with a subject prefix and with one of a contrasting set of aspect, mood and modality categories. These are aorist (unmarked), progressive, habitual, potential, subjunctive and imperative. There are also two optional aspect/modality categories, which occur in different slots on the verb and combine with one of the contrasting categories. These are the recurrent and the intentive. Avatime does not have grammatical tense (Defina, in press). Other affixes on the verb include the directional prefixes (itive and ventive), and the comitative suffix. The complete structure of the Avatime verb can be seen in (52). An example with many of the slots filled is shown in (53).

(52) Subject Marker - (Negative) - (Aspect/Mood) - (Intentive) - (Recurrent) - (Prohibitive) - (Directional) - Root - (Comitative)

(53) *mɔ́-tá-zɛ̌-zɛ-panì=wɔ*
1s.SBJ:NEG-INT-REC-IT-talk=2s
'I will not be going to talk with you.' (R0811291_AB)

2.5.1 Subject markers

There are three sets of subject markers in Avatime, each of which contains a form for every noun class and person/number combination. The subject markers are obligatory, except in the imperative. If there is a lexical subject, the markers function as agreement markers and in the absence of a lexical subject they have a pronominal function. Table 2.6 shows the three sets of subject markers.

The prefixes in set 1 for 1st and 2nd person singular and noun classes 5 singular, 5 plural and 6 plural have variable tones. These prefixes bear a high tone if the tone on the following syllable is low and a low tone otherwise. An example can be seen in (54). With the noun class prefixes, this only happens when the subject noun has a low tone prefix.

(54) a. ***mè**-dzi dɔ̀mɛ*
1s.SBJ-buy thing
'I bought something.'

b. ***me**-dò*
1s.SBJ-move.out
'I went out.'

Table 2.6: Three sets of subject markers.

	Set 1	Set 2	Set 3
1st person sg	mA-	mO-	mÍ-
1st person pl	kI-	kU-	kÍ-
2nd person sg	wO-	wO-	wÚ-
2nd person pl	mlE-	mla-	mlÍ-
Class 1 sg	A-	O-	I-
Class 1 pl	bE-	ba-	bI-
Class 2 sg	È-	Ò-	Ì-
Class 2 pl	Ì-	Ì-	Ì-
Class 3 sg	lI-	lI-	lI-
Class 3 pl	E-	a-	I-
Class 4 sg	kI-	kI-	kI-
Class 4 pl	bI-	bI-	bI-
Class 5 sg	kI-	kÙ-	kI-
Class 5 pl	bE-	bà-	bI-
Class 6 sg	kE-	ka-	kI-
Class 6 pl	kI-	kÙ-	kI-
Class 7	sI-	sI-	sI-

The three sets of subject markers are used in different aspect/modality/polarity configurations. Set 1 is used in the aorist aspect with most verbs. Set 2 is used in the aorist aspect with locative, positional and copula verbs, with all verbs when negated and with some verbs in the subjunctive mood. Set 3 is used with the habitual aspect and with some verbs in the subjunctive mood.

The class 1 singular subject prefix of a complement clause is marked as logophoric if it refers to the same referent as the subject of the matrix clause. Logophoric marking consists of adding *y* to the subject prefix. This can be seen in (55), where a subject prefix from set 3 is marked as logophoric.

(55) *pɔ̀ yɔ kɔ ɔ́-pɛ sị̀ **yí**-pe*
but C_{1s}.CTR CTR1 C_{1s}.SBJ.NEG-want COMP **C_{1s}.LOG**.SBJ.SBJV-tire
'But as for her, she doesn't want to get tired.'
(conv-greenhouse_110408_SO-ViA)

2.5.2 Aspect, mood and modality

This subsection provides a brief overview of the aspect, mood and modality markers in Avatime. Avatime does not have grammatical markers for tense

(Defina, in press). The semantics of the aspect, mood and modality markers is discussed in detail in Defina (2009) and Defina (in press). For more information, the reader is referred to these works.

2.5.2.1 Aorist

The aorist is an unmarked perfective aspect and is the most common aspect in Avatime (Defina, 2009).[7] It is unmarked in the sense that it does not have a dedicated prefix on the verb. Subject prefixes in the aorist are taken from set 1 (56) or in the case of positional and copula verbs from set 2 (57).

(56) *lɛ̌* *mà-tɔ́* *dɔ̀mɛ*
then 1s.SBJ-cook something
'Then I cooked something.' (Interview_KA-RE)

(57) *o-dí* *li-gbo-le* *mè*
C_{1s}.SBJ-sit:LOC C_{3s}-chair-DEF inside
'She is sitting in a chair.' (expnew26_s1_130821)

The aorist is used to refer to completed actions (56), states (57)-(58) and generic situations (59).

(58) *ò-gbé* *lɔ́-yà* *è-dzè*
C_{2s}-rope C_{2s}-this C_{2s}.SBJ-be.long
'This rope is long.' (S0810271_SO)

(59) Part of a description of how puberty rites were performed in the past.
kɔ *mlɛ-tré* *ke-pe-a* *mɛ̀=ɛ*
then 2p.SBJ-go:LOC C_{6s}-house-DEF in=CM
'Then you would go home.' (ablabe AD-YD)

2.5.2.2 Progressive

The progressive aspect is used to refer to situations that are ongoing. The marker is fused with the subject prefix. It consists of the onset of the subject prefix, followed by *ÌÍ* if the vowel of the subject prefix in set 1 is *I* and *ÈÉ* otherwise. Examples can be seen in (60).

[7] This aspectual category is very common in West-African languages. The label aorist is used as this is the common way to refer to this category in the literature on these languages.

(60) a. *èɛ́-wà* *à-xwɛ̀-na*
C_{1s}.SBJ.PROG-do C_{3p}-work-DEF
'She is working.'

b. *kɪ̀ɪ́-wà* *à-xwɛ̀-na*
1p.SBJ.PROG-do C_{3p}-work-DEF
'We are working.'

2.5.2.3 Habitual

The habitual aspect is marked with the prefix *zɛ̌-*. The subject prefix is taken from set 3 and always carries an extra-high tone. The habitual refers to events that are repeated during an extended period of time and are considered usual (61). It can also refer to generic situations (62).

(61) In a story about the history of the Avatime people.
xé *bɛ-trɛ* *kù-de-ò* *ɔ-ŋwá* *te* *bɪ́-zɛ̌-pɔɪ̀*
when C_{1p}.SBJ-go C_{5s}-road-DEF INF-weed like.this C_{1p}.SBJ-HAB-roast
bɪ̀-dɔ̀mɛ *ŋà*
C_{4p}-thing eat
'When they went to weed the road like that they used to roast food to eat.' (History_WO)

(62) Talking about the third son in a row.
ki-befú *bí-zě-befu*
C_{4s}-be.hot:FOC C_{1p}.SBJ-HAB-be.hot
'They are usually hot (meaning: active, troublesome).'
(conv-street_100720_1)

2.5.2.4 Potential

The potential modality marker is fused with the subject agreement marker. It consists of the onset of the subject prefix followed by *áà* unless the vowel of the subject prefix is *I*, in which case it becomes *íà*.

The potential refers to potential events. These can be events in the future (63) or other events with an uncertain epistemic status (64).

(63) *kɔ* *xé* *gì* *wo-dó* *sùku-ɛ* *èɡé* *wáà-bɪ̀tɛ*
so when REL 2s.SBJ-move.out:LOC school-DEF what 2s.SBJ.POT-do
'So when you finish school, what will you do?' (Interview_KA-RE)

(64) *wáà-tanị̀ klɔ tsyɛ ɔ-gà*
2s.SBJ.POT-can there ADD INF-move
'You can pass there too.' (Interview_GE-MM)

2.5.2.5 Subjunctive

The subjunctive modality is marked by the use of subject prefixes from set 2 or 3, depending on the verb. Like the aorist, the subjunctive does not have a dedicated prefix.

The subjunctive is mostly used in subordinate clauses, especially in the complements of the verbs *nu* 'be' and *pɛ* 'want'. Examples can be seen in (65) and (66).

(65) *li-nu sị̀ mí-zè ke-pe-à kìvò*
C_{3s}.SBJ-be COMP 1s.SBJ.SBJV-be C_{6s}-house-DEF tomorrow
'I must be home tomorrow.' (R11253_MM)

(66) *mà-pɛ sị̀ mí-se*
1s.SBJ-want COMP 1s.SBJ.SBJV-run
'I want to run (literally: I want that I run).' (RS09052_SO)

When the subjunctive is used in main clauses, it indicates that the speaker thinks the situation should hold. It can also be used to make a polite request. This can be seen in (67) and (68).

(67) *kú-trɛ*
1p.SBJ.SBJV-go
'We should go.' (Wake_WB)

(68) *mí-bu be bàsị́=yɛ*
1s.SBJ.SBJV-remove C_{1p} show=C_{1s}.OBJ
'Let me explain it to him.' (Ablabe_PA)

2.5.2.6 Imperative

The imperative is indicated by the absence of a subject marker and is used to give a directive to a single addressee. An example can be seen in (69). To give a directive to multiple addressees, the subjunctive is used.

(69) *ŋà bị-déyà*
eat C_{4s}-thing:PROX
'Eat this!' (RS0809032 SO)

2.5.2.7 Recurrent

The recurrent aspect is one of the two optional aspect/modality categories. It always occurs combined with one of the set of contrastive aspects and modalities mentioned above. It is marked with the prefix *zĚ-*, which is sometimes replaced by *zǑ-* in the potential mood. It refers to events that are ongoing or repeated over a certain interval of time. Examples can be seen in (70), in which the recurrent is combined with the aorist aspect and in (71), in which it is combined with the potential modality.

(70) *a-zě-read law ní Legon University of Ghana*
C_{1s}.SBJ-REC-study law LOC Legon University of Ghana
'He was studying law at the University of Ghana, Legon.' (Life_AB)

(71) *tɔ kíà-zě-ba ke-pe-à*
PURP 1p.SBJ.POT-REC-come C_{6s}-house-DEF
'We shall be coming home (often).' (Interview_KA-RE)

2.5.2.8 Intentive

The intentive modality is marked with the prefix *tá*. It is similar in meaning to the potential, in that it is usually interpreted with future reference. However, unlike the potential, the intentive cannot be used to refer to events that might have happened. The intentive indicates that the event will be performed intentionally. An example can be seen in (72).

(72) *bɛ-tá-ŋa dɔ*
C_{1p}-INT-eat thing
'They were going to eat.' (History_WO)

2.5.3 Negation

Negation is marked with an extra-high tone on the subject prefix. The subject prefix usually comes from set 2. Examples can be seen in (73).

(73) *bɛ-ba* 'they came'
bá-ba 'they did not come'
bi-pɛ̀ 'it is good'
bí-pɛ̀ 'it is not good'

The progressive and habitual markers change in form when the verb is negated. The negative progressive marker is *lḯ-*, as in (74) and the negative habitual is marked with a rising tone only, as in (75).

(74) *mɔ́-lḯ-ŋà* *blàlị̀*
1s.SBJ:NEG-NEG.PROG-eat plantain
'I am not eating plantain.' (RS0809032_SO)

(75) *mɔ̌-ta* *kị̀-mịmị̀*
1s.SBJ:NEG.HAB-eat C_{4s}-rice
'I don't usually eat rice.' (RS0809032_SO)

The subjunctive and imperative can be negated by using the prohibitive prefix *kU-/kI-*, as in (76).

(76) *wò-kú-trɛ* *ní* *lị̀-gba-lɛ̀*
2s.SBJ-PROH-go LOC C_{3s}-building-DEF
'Don't go to the house.' (Lego_AB-WO_3)

It is not possible to negate a verb in the potential mood. To convey a negated potential state of affairs, the negated aorist plus the intentive prefix is used, as in (77).

(77) *wɔ́-tá-mɔ̀* *onò*
2s.SBJ:NEG-INT-see soup
'You will not see the soup.' (conv-street_100720_1)

The particle *aní* can also be used to form negation. It takes scope over a particular noun phrase, focused element or complement clause. Examples can be seen in (78) and (79).

(78) *pɔ̀* *aní* *kị̀-mịmị̀-ɛ́* *kíà-zɔ̌-ta*
but NEG C_{4s}-rice-DEF:FOC 1p.SBJ.POT-REC-eat
'But it is not only rice that we shall be eating.' (greetings_130807_PKD)

(79) When looking at an unopened bottle of liquor.
aní *akpɛtɛshi*
NEG t.o.liquor
'It is not akpeteshi.' (conv-rice_110411_3-3)

2.5.4 Other verb affixes

2.5.4.1 Epistemic certainty

There is a prefix *nya-* that seems to mean something like 'really' or 'actually'. An example can be seen in (80). This is likely borrowed from Ewe, which has a prefix *nya-* that indicates epistemic certainty (Ameka, 2008).

(80) *wɔ̀-nya-pɔnị̀=mɛ*
2s.SBJ-really-help=1s.OBJ
'You've really helped me.' (Ablabe_AD-YD)

2.5.4.2 Directionals

There are two directional prefixes: *bá/bé-* 'ventive' *ʒE-* 'itive'. These prefixes indicate the direction of the action described by the predicate as towards (ventive) or away from (itive) the deictic center.

The directional prefixes are likely grammaticalized serial verb constructions in which the verbs *ba* 'come' and *ʒa* 'pass' were used as initial verbs. The subject prefixes that precede these directional prefixes always occur in their -ATR form, even when the prefix itself is +ATR. This seems to reflect their origins as verb roots with -ATR vowels. The prefix *ʒE-* itself harmonizes with the verb, but the alternation of the ventive prefix is not based on vowel harmony. Instead, the *bé-* variant is used in those cases that would have had a serial verb marker *e-* between the two verbs when they were still a serial verb construction. Examples can be seen in (81).

(81) a. *a-bé-ku*
C_{1s}.SBJ-VEN-arrive
'S/he has arrived (here).'

b. *ɛ̀ɛ́-bá-ku*
C_{1s}.SBJ.PROG-VEN-arrive
'S/he has been arriving (here).'

c. *a-ʒe-ku*
C_{1s}.SBJ-IT-arrive
'S/he has arrived (there).' (S0811172_MM)

2.5.4.3 Comitative

The comitative *-nI/-nO* is the only verbal suffix in Avatime. It adds a comitative argument to the predication. An example can be seen in (82).

(82) a. *a-sɛ̀*
C$_{1s}$.SBJ-leave
'He left.'

b. *bɛ-sɛ-nì=yɛ*
C$_{1p}$.SBJ-leave-COM=C$_{1s}$.OBJ
'They took him away / they left with him.'

Suffixation of the comitative is not a very productive process in Avatime. There are several verb + comitative combinations with idiosyncratic meanings such as *ku* 'arrive' and *kunì* 'follow'. There are also many frozen verb + comitative combinations, the original verb of which does not exist in the language anymore. An example is *panì* 'talk (with someone)', which does not have a corresponding form *pa* 'talk'.

2.5.5 Nominalization and infinitives

Non-finite complements may be unmarked, may be marked with the infinitive prefix *O-* or may be marked with the noun class 5 prefix, leading to a semi-nominalised form. These three alternatives seem to lead to the same meaning and can be seen in (83).

(83) *e-kpese* *ò-ni-nò* *tɔ* / *ɔ-tɔ* / *kụ-tɔ*
C$_{1s}$.SBJ-start.to C$_{2s}$-soup-DEF cook / INF-cook / C$_{5s}$-cook
'She started to cook the soup.'

Semi-nominalized forms such as *kụtɔ* above cannot function as nouns. To fully nominalize a verb, the verb root must be reduplicated in addition to adding the class 5 prefix. An example can be seen in (84).

(84) *blɔ kò kɨ́-zɛ̌-pɔnì=yɛ* *ní* *si-deme-se*
1p just 1p.SBJ-HAB-help=C$_{1s}$.OBJ LOC C$_7$-avatime-DEF
ku-kpasì-kpasì-ɔ *mɛ̀*
C$_{5s}$-RED-learn-DEF inside
'We help her with learning the Avatime language.'
(Language-use_130810)

2.6 Ideophones and adverbs

2.6.1 Ideophones

Following Dingemanse (2011, p 25), I define ideophones as "marked words that depict sensory imagery". Structurally, ideophones often contain repeti-

tion of syllables or syllable combinations such as *fotsofotso* 'light (weight)', *trátrátrátrá* 'very neat' and *rìdìdìdìdì* 'continuously'. Often, these syllables or syllable combinations can be repeated freely, as many times as the speaker wants. Another characteristic that many ideophones share is a long final vowel, as in *hããããã* 'intensely staring' and *blèwùù* 'slowly'. Ideophones may contain syllables that end in a consonant, unlike most other words in Avatime. This coda consonant is always a nasal, as in *pîm* 'very big' (see also Section 2.2.3). As Dingemanse (2011) also observes for Siwu, ideophones are on average longer than other words in the language, which most frequently have monosyllabic roots (see Section 2.2.3) and ideophones frequently consist of syllables which all have the same vowel and the same tone.

Ideophones can occur in different places in the sentence. They are frequently used adverbially, modifying the predicate. Sometimes the ideophone goes together with a particular verb that is related in meaning, as in (85). In other cases it is a more general modifier that can be used with different types of predicates, as in (86). Ideophones can also be used with the verb *lí* 'be at', as in (87). They can also be used as adjectives, as the two ideophones *hwliyaa* and *pɪ̀tɪ̀tɪ̀tɪ̀* in (88) show. They can also occur independently, outside the structure of the sentence as in the last word of (88).

(85) *ò-besì-lo* *pɔ̀=ɛ* *ò-nu* *ɔ-ga* *gì* *ɛ-hwa*
C$_{2s}$-sheep-DEF CTR2=CM C$_{2s}$.SBJ-be C$_{1s}$-animal REL C$_{2s}$.SBJ-be.white
pɪ̀tɪ̀tɪ̀tɪ̀
ID.white
'As for the sheep, it is an animal which is very white.'
(kadzidzi-chiefsson_PKD_20110924)

(86) *bèé-hè* *ò-gbe-nò* ***rìdìdìdìdìdì,*** *ò-gbe-nò*
C$_{1p}$.SBJ.PROG-pull C$_{2s}$-rope-DEF **ID.continuously** C$_{2s}$-rope-DEF
e-dzè
C$_{2s}$.SBJ-be.long
'They were pulling the rope for a long time, the rope was long.
(kadzidzia_110406_QM)

(87) *xé* *àbla* *ò-dùdru-lò* *pɔ̀* *ɔ̀-lí* ***drɪ̀nɪ̀drɪ̀nɪ̀***
and now C$_{2s}$-t.o.plant-DEF CTR2 C$_{2s}$.SBJ-be.at **ID.sticky**
'And now the *odudru* is very sticky.' (illness_100616_SO-DS)

(88) *kò ɔ-kàtsì ɔ́-tɔ nì ɔ̀-tàmi-nɔ̀ **hwliyaaa** **pịtịtị***
just C_{1s}-old.man C_{1s}-INDF with C_{2s}-beard-DEF **ID.unkempt** **ID.white**
kò a-wɔ́li a-dɔ́ li-fu-nè a-dɔ́
just C_{1s}.SBJ-fall C_{1s}.SBJ-move.from:LOC C_{3s}-sky-DEF SVM-land:LOC
*ke-se-à **tîm***
C_{6s}-ground-DEF **ID.sound.of.landing**
'Just then, an old man with an unkempt white beard fell from the sky and landed on the ground *tîm*.' (kadzidzia_110406_QM)

2.6.2 Adverbs

Most modifiers of verbs, predicates and sentences are ideophones, but there is also a small set of non-ideophonic adverbs. Some examples are *tàe* 'a little', *kóko* 'already', *nyàfɛ* 'maybe' and *àbla* 'now'. These words have no morphological characteristics in common and are classified as adverbs purely based on their modifying function. Examples can be seen in (89) and (90). Most adverbs and adverbials occur in sentence final position (see also Section 2.7.1).

(89) *àblé ké tsyɛ ki-dzì tré ke-de-à **tàe***
now same ADD 1p.SBJ-return go:LOC C_{6s}-back-DEF:LOC **a.little**
'Now again, we are going back a little.' (birthing_AB-SO_20110901)

(90) *ka-klí́ ká-lɔ̀ xunyɔ = ɛ me-bù = ka **kóko***
C_{6s}-step C_{6s}-DIST CTR3 = CM 1s.SBJ-remove = C_{6s}.OBJ **already**
'That step, I have taken it already.' (chiefs-meeting_100619_03)

Several temporal expressions such as the words for today and yesterday are nouns, but usually function as adverbials. *Òmonò* 'today' has the class 2s prefix *Ò-* and definite article *-nO*. The concepts of 'tomorrow' and 'yesterday' are expressed by the same noun, *kivò*, with the noun class 4 singular prefix *ki-*. When it refers to yesterday, the definite article *-E* is added to form *kivòe*. To talk about a few days ago or a few days from now, the root *de* 'back' is added to *kivò*, forming *kivòde*. Again, when the day talked about is in the past, the definite article *-E* is added, forming *kivòdeè*. An example of the use of *kivòe* can be seen in (91).

(91) *wò-dzi ì-vɔ́í mɔ klɔ̀ kivòe*
2s.SBJ-buy C_{2p}-eggplant:LOC 1s place yesterday
'Did you buy eggplants from me yesterday? (conv-street_100720_1)

2.7 Simple sentences

2.7.1 Constituent order

The canonical constituent order of Avatime can be seen in (92).

(92) CLM/LD - foc - sbj - verb - indir.obj - dir.obj - oblique - adjunct - FP

The leftmost elements in the sentence are the clause linkage marker (CLM) and left dislocated (LD) elements. There can be multiple left dislocated elements and they can either precede or follow the clause linkage marker (see Section 4.2.1). These sentence-initial elements are followed by the focus-marked element (foc), of which there can only be one (see Chapter 3 on focus). The subject (sbj), if present, precedes the verb, and the object (obj) and/or oblique argument follow the verb. Adjuncts (adj) follow the object and/or oblique argument and the sentence can be closed off by a final particle (FP).

The only obligatory element in an Avatime clause is the inflected verb. Lexical subjects are optional. An example of a clause consisting of just a verb can be seen in line 2 of (93).

(93) 1 A: *wo-bí* *lɛ́yà* *tsyɛ* *ɨ́-zɛ̌-hwa-nì* *ɨ̀sɥ́*
2s.POSS:C_{1s}-child C_{1s}.PROX ADD C_{1s}.SBJ-HAB-move-COM body
kóŋ *pɔ̀*
at.all CTR2
'This child of yours, does she move at all?'

2 B: *ɨ́-zɛ̌-hwa-nì*
C_{1s}.SBJ-HAB-move-COM
'She moves.'

Examples (94) and (95) show clauses with many of the slots mentioned in (92) filled in.

(94) *kata-ɛ* *e-vù* *mo-bi* *nyanìnyanì* *lo*
cold-DEF C_{1s}.SBJ-catch 1s.POSS:C_{1s}-child bad FP
SBJ **VERB** **OBJ** **ADJ** **FP**
'My child has a bad cold.' (conv-street_100720_1)

(95) *kɔ* *ba* *petee* *àkpɔ̀kplɔ̀-ɛ* *kó* *bɛ̀ɛ́-pɛ*
then C_{1p} all frog-DEF only:FOC C_{1p}.SBJ.PROG-look.for
CLM **LD** **FOC** **VERB**
ní *ì-se-le* *mɛ́* *te*
LOC C_{2p}-tree-DEF inside like.that
ADJ **ADJ**
'So all of them, were they only looking for the frog in the trees like that?'
(frog_100719_DQ-PhA)

When the verb is transitive, the object is usually mentioned. If the object has been mentioned in the immediately preceding discourse, it is usually expressed with a pronoun. However, it is also possible to leave out the object entirely when it can be recovered from the context. This happens most frequently in serial verb constructions. An example can be seen in (96). In the first line, the rice and chicken are mentioned. Because of this, a pronoun (*kɛ*) is enough to refer to this food in the next line. In the final line, the food is the object of the verb *kɔ* 'take', but no pronoun is used to refer to it.

(96) 1 *bɛ̀ɛ́-tɔ* *kɨ̀-mɨ̀mɨ̀-ɛ̀* *nì* *ɔ̀-kʊ́kɔ-lɔ̀*
C_{1p}.SBJ.PROG-cook C_{4s}-rice-DEF with C_{2s}-chicken-DEF
ki-dzya-ɛ
C_{4s}-meat-DEF
'They are cooking rice with chicken.'

2 *bɛ-gba=kɛ*
C_{1p}.SBJ-fry=C_{4s}.OBJ
'They have fried it.'

3 *bɛ-tá-kɔ* *ɛ-bɨ̀tɛ* *jolof*
C_{1p}.SBJ-INT-take SVM-make t.o.fried.rice
'They will use (it) to make jolof rice.' (kadzidzia_110409_AB_1)

2.7.2 Transitivity

There are intransitive, transitive, ditransitive and ambitransitive verbs in Avatime. An intransitive verb can be seen in (97), a transitive verb in (98) and a ditransitive verb in (99).

(97) *wo-ze-wló* *kè-ni-a* *mɛ̀*
2s.SBJ-IT-bathe:LOC C_{6p}-river-DEF inside
'You would go and bathe in the river.' (ablabe_AD-YD)

(98) *wáà-tsa* *ɔ̀-lị̀lɔ̀-lɔ*
2s.SBJ.POT-cut C_{2s}-palm.branch-DEF
'You will cut the palm branch.' (illness_100616_SO-DS)

(99) *a-zɛ-bàsị=blɔ* *bà-lị-à*
C_{1s}.SBJ-IT-show=1p.OBJ C_{5p}-palm.tree-DEF
'He went to show us the palm trees.' (conv-ablorme_100715_SO-AS)

Ambitransitive verbs always take the undergoer as their subject when they are used intransitively. An example can be seen in (100), where (100a) shows the transitive use of the verb *wɔlị̀* 'fall/drop' and (100b) shows the intransitive use.

(100) a. *a-zɛ-wɔ́lị=yɛ* *kpɛ* *ní* *kù-ni-o* *mè*
C_{1s}.SBJ-IT-drop=C_{1s}.OBJ put.in LOC C_{5s}-water-DEF inside
'He went and dropped him into the water.' (frog_100719_DQ-PhA)

b. *ɔ́-dzɛ* *tole* *tsyɛ* *a-wɔlị̀*
C_{1s}-woman C_{1s}.one ADD C_{1s}.SBJ-fall
'One woman also fell.' (kadzidzia_110406_QM)

There are several verbs of motion and placement that specify a particular type of ground argument in their semantics, which is realized as an obligatory oblique argument (see also van Putten, 2009). Example (101) shows the verb *dɔ* 'move from' which selects a source as oblique argument, The placement verb *trɔ* in (102) selects for a goal argument.

(101) *bɛ́-dɔ́* *ní* *ò-dzòɡbè-lo* *ɔ̀-za-lɔ̀*
C_{1p}.SBJ-move.from LOC C_{2s}-desert-DEF C_{2s}-direction-DEF
'They came from the direction of the desert.' (history_WO)

(102) *a-trɔ* *ɔ̀-wlà-lɔ* *ní* *ò-nuɡu-lò*
C_{1s}.SBJ-put.on C_{2s}-hand-DEF LOC C_{2s}-mouth-DEF
'He put his hand on his mouth.' (famprob_110409_DQ-KX_story)

There is no passive construction in Avatime. The construction that comes closest to expressing a passive meaning is the use of an impersonal third person (class1) plural subject prefix, demoting the actor. The undergoer can be made more salient by left dislocating it. An example can be seen in (103). Here, the object 'you two' is left dislocated and the subject is unspecified.

(103) In a traditional tribunal, a number of girls have been summoned to appear because they broke a local law. At some point, two men stand up to speak on behalf of the girls. The chief, who is leading the meeting, asks:

mlɔ tiabà tsyɛ bɛ-kị́=mlɔ ku-plikpá lɔ̀
2p C_{1p}.two ADD C_{1p}.SBJ-give=2p.OBJ C_{6p}-letter DIST
'You two, were you also summoned (literally: did they also give you those letters)?' (tribunal_100513_4)

The only valency changing morphology is the comitative suffix *-nÒ/-nÌ*, which makes an intransitive verb transitive. This suffix is discussed in Section 2.5.4.3.

2.7.3 Question formation

2.7.3.1 Polar questions

Most of the time, polar questions are structurally the same as statements. This can be seen in (104a). To make a sentence an unambiguous question, the final particle *na* can be added, as shown in (104b).

(104) a. *kofí á-yái kè-pli-à*
Kofi C_{1s}.SBJ-break C_{6s}-calabash-DEF
'Kofi broke the calabash' / 'Did Kofi break the calabash?'

b. *kofí á-yái kè-pli-à* ***na***
Kofi C_{1s}.SBJ-break C_{6s}-calabash-DEF **Q**
'Did Kofi break the calabash?' (elic-qa_100525_SO)

The final particle *na* is rarely used to mark polar questions in my corpus of spontaneous discourse. Out of 109 non-embedded polar questions, 5 end in *na* and 4 end in a reduced form, *a*. The particle *na* is used more frequently in embedded questions, as in (105). It can also be added to content questions, as I will show below.

(105) *lɛ̌ ò-le e-bì ɔ́-dzɛ sị̀ fɔ́*
then C_{2s}-crocodile C_{2s}.SBJ-ask C_{1s}-woman COMP where
ɛ̀ɛ́-trɛ na
C_{1s}.SBJ.PROG-go Q
'Then the crocodile asked the woman where she was going.'
(kadzidzi-crocodile_PKD_20110924-3)

Polar questions without final *na* can sometimes be distinguished from statements by intonation as they may end with a high boundary tone. This

is only audible when the sentence ends in a low tone and it is optional; there are also cases of polar questions that cannot be distinguished from statements based on intonation.

2.7.3.2 Content questions

In content questions, the question word usually occurs sentence initially in the position that is also used for focus-marked elements (see Section 2.7.1 on constituent order and Chapter 3 on focus). Question words are followed by a floating extra high tone, which attaches to the final syllable. This extra high tone also attaches to focus-marked elements (see Chapter 3). Example (106) shows a subject question (a) and an object question (b).

(106) a. ***nyaŋwɛ́*** *á-ta* *á-va-nà*
who:FOC C_{1s}.SBJ-chew C_{3p}-bean-DEF
'Who ate the beans?'

b. ***egé*** *ɔ́-dzɛ* *a-ŋà*
what:FOC C_{1s}-woman C_{1s}.SBJ-eat
'What did the woman eat?' (elic-QUIS-foc_100714_SO)

Example (107) shows that the extra high tone focus marker attaches to the entire question phrase (*nyaŋwɛ liwu* 'whose clothes') and not to the question word itself.

(107) ***nyaŋwɛ*** ***li-wú*** *lị̀-tsyị̀*
who **C_{3s}-clothes:FOC** C_{3s}.SBJ-tear
'Whose clothes are torn?' (elic-QUIS-foc_100714_SO)

Times (108), reasons (109), manners (110) and places (111) can also be questioned.

(108) ***lipólí*** *ɔ́-dzɛ-ɛ* *a-tá-ŋa* *dɔ̀mɛ*
when:FOC C_{1s}-woman-DEF C_{1s}.SBJ-INT-eat thing
'When will the woman eat? (elic-QUIS-foc_100714_SO)

(109) ***ège*** ***lɛ*** ***lósó*** *ɔ́dzɛ-ɛ* *á-ta* *á-va-nà*
what **C_{3s}** **reason:FOC** C_{1s}-woman-DEF C_{1s}.SBJ-eat C_{3p}-bean-DEF
'Why did the woman eat the beans?' (elic-QUIS-foc_100714_SO)

(110) ***kɪ̀tɛ́*** *ma-tá-bɪ̀tɛ* *máà-kpɛ* *kivòde*
how:FOC 1s.SBJ-INT-do 1s.SBJ.POT-put.in day.after.tomorrow
'How will I put it (a wig) on the day after tomorrow?'
(conv-hair_100805_CA-AB)

For extra emphasis, the question particle *na* can be added at the end of a content question, as in (111).

(111) ***nífɔ́*** *máà-mɔ̀* *ki-bù-ye* ***na***
where:FOC 1s.SBJ.POT-see C_{4s}-honey-DEF **Q**
'Where can I find honey?' (conv-street_100720_2)

Content questions are followed by a low boundary tone, resulting in a falling tone on the last syllable if this tone is not low (cf. Ford's (1971a) extra low 'drop' tone).

Question words can also occur in situ, in which case they have an 'echo question' interpretation, initiating repair. This can be seen in (112) where both speakers B and C respond to speaker A's utterance with an in-situ question word.

(112) 1 A: *mà-ŋwɪ̀* *lɔ̀* *kókó* *lo*
1s.SBJ-appear there already FP
'I already appeared there.'
2 B: *wɔ-lɪ́* ***fɔ*** *kóko*
2s.SBJ-be.at **where** already
'You were where already?'
3 C: *wɔ-bɪ̀tɛ* ***ègé***
2s.SBJ-do **what**
'You did what?' (conv-rice_110411_3-2)

2.7.4 Serial verb constructions

Serial verb constructions (SVCs) are constructions in which two or more finite verbs occur in one clause without any marking for coordination or subordination. An example of an Avatime serial verb construction can be seen in (113).

(113) *á-kɔ* *li-kùto-lè* *kumè*
C_{1s}.SBJ-take C_{3s}-hat-DEF wear
'She put the hat on. (contrexp26_s3_120912)

Avatime SVCs usually consist of two verbs, but constructions with more than two verbs are possible, as in (114).

(114) *ba* *petee* *bị́-zɛ̌-za* *ɛ́-klanì* *ị́-pɛ*
C_{1p} all C_{1p}.SBJ-HAB-pass SVM-move.around SVM-look.for
bị-ŋàŋà-wɛ *ní* *lị-ŋwàfị̀-nɛ* *mɛ̀*
C_{4p}-food-DEF LOC C_{3s}-forest-DEF inside
'All of them used to walk around looking for food in the forest.'
(kadzidzia_110406_QM)

Avatime serial verb constructions are typologically unusual in that there are specific morphological markers that mark subsequent verbs in the serial verb construction (see also van Putten, 2009; Defina, 2014b). These are not markers of coordination or subordination, but occur only in serial verb constructions. I refer to these as serial verb markers and they are abbreviated as SVM. In the aorist, these markers are reduced subject prefixes, i.e. the subject prefix without initial consonant. This can be seen in (115).

(115) *mà-dɔ* *kù-de-ò* ***à*-za**
1s.SBJ-land C_{5s}-road-DEF **SVM**-pass
'I crossed the road.' (elic S0811111 SO)

In the potential mood, the serial verb marker is either the reduced subject prefix or the marker *O-* (116) and in the other aspects and moods the marker is *E-* (117).

(116) *kíà-se* ***ɔ*-sɛ̀**
1p.SBJ.POT-run **SVM**-leave
'We will run away.' (elic S0811271 AB)

(117) *bɛ̀ɛ́-ŋwya* ***ɛ́*-kpɛ**
C_{1p}.SBJ.PROG-throw **SVM**-put.in
'They were throwing it in.' (kadzidzia_110406_QM)

The serial verb markers are disappearing from the language. They are only used by older people; young people mostly just use the bare verb as in (113) above.

Serial verb constructions can have several different semantic functions. Defina (2014b) describes five semantic types: postural (posture verb + activity verb), manner (with an initial manner verb, as in (116) above), theme (in which an initial take verb has the theme of the following verb as its object, as in (113) above), argument-adding (using a take verb to add an instrument

or the verb 'give' to add a benefactor) and sequential (two sequential actions, as in (118)).

(118) *lɛ̌* *a-ya=lɛ* *e-dù=i*
then C_{1s}.SBJ-divide=C_{3s}.OBJ SVM-put=CM
'Then she divided it (the porridge) and put it down.'
(kadzidzia_110406_QM)

There also seem to be subtle differences between different types of SVCs in how tightly the two verbs are linked syntactically. Especially sequential SVCs have a looser connection between verbs than the other types. More information on the semantic and syntactic subtypes of serial verb constructions can be found in Defina (2014b). More information about motion serial verb constructions can be found in van Putten (in press).

2.8 Complex sentences

2.8.1 Subordinate clauses

2.8.1.1 Complement clauses

Complement clauses are subordinate clauses that function as arguments in the main clause. Cristofaro (2003) distinguishes eight categories of complement taking predicates: modals, phasals, manipulatives, desideratives, perception, knowledge, propositional attitude and utterance. All except the first two are expressed in Avatime with the same verb-complement construction with the complementizer *sị̀*. Some examples can be seen in (119) and (120), repeated from (55).

(119) *ma-mɔ̀* *sị̀* *yɛ* *nì* *ɔ-nụ̀vɔ̀* *ɔ́-tɔ* *bɛ̀ɛ́-za*
1s.SBJ-see COMP C_{1s} and C_{1s}-child C_{1s}-INDF C_{1p}.SBJ.PROG-pass
'I saw that he and a certain child were passing.'
(famprob_110409_DQ-KX_story)

(120) *pɔ̀* *yɔ* *kɔ* *ɔ́-pɛ* *sị̀* *yí-pe*
but C_{1s}.CTR CTR1 C_{1s}.SBJ.NEG-want COMP C_{1s}.LOG.SBJ.SBJV-tire
'But as for her, she doesn't want to get tired.'
(conv-greenhouse_110408_SO-ViA)

Cristofaro's phasal predicates are not expressed as complement clauses in Avatime, but some modal predicates are. To express necessity, a construction

involving a copula or positional verb and a complement clause is used, which is exemplified in (121).

(121) *lị-lɛ* *sị̀* *kụ-bị̀tɛ* *kị-bị̀tɛ́tɔ*
C$_{3s}$.SBJ-be.at COMP 1p.SBJ.SBJV-do C$_{4s}$-do:INDF
'We have to do something.' (literally: It is that we do something).
(chiefs-meeting_100619_03)

When the third person singular subject of the main clause is identical in reference to the subject of the subordinate clause, the subject prefix on the subordinate verb is marked as logophoric. This can be seen in (120) above.

The complementizer *sị̀*, like complementizers in related languages (see Lord, 1993) seems to have a verb of saying as its origin. This is the verb *sị* 'say/tell', which only differs from the complementizer in tone. The verb and complementizer are frequently used together, especially when a recipient argument needs to be expressed, as in (122). If there is no recipient argument, the verb *do* 'say' seems to be preferred, as in (123).

(122) *ɔ́niyɛ* *ɛ̀ɛ́-sị=mɛ* *sị̀*
someone C$_{1s}$.SBJ.PROG-tell=1s.OBJ COMP
mí-zě-di=ye
1s.SBJ.SBJV-IT-look.at=C$_{1s}$.OBJ
'Someone was telling me I should go and see her.'
(conv-funeral_100528_7)

(123) *be-zě-do* *sị̀* *be-dzì-nì=ye*
C$_{1p}$.SBJ-REC-say COMP C$_{1p}$.SBJ-return-COM=C$_{1s}$.OBJ
kivòde
day.before.yesterday
'They were saying that they brought her back the day before yesterday.'
(conv-funeral_100528_7)

Embedded questions are also marked with the complementizer *sị̀*, which is immediately followed by the conjunction *kɔ* 'and/then'. They end with the question particle *na* (see Section 2.7.3). An example can be seen in (124).

(124) *kìí-vi* *sị̀* *kɔ* *bɛ-tá-bị̀tɛ* *ki-dítɔ* *na*
1p.SBJ.PROG-ask COMP and C$_{1p}$.SBJ-INT-do C$_{4s}$-thing:INDF Q
'We asked if they will do something.' (conv-funeral_100528_9)

There are also complement clauses without a complementizer. I found these only with two verbs: the verb *sị* 'say/tell' and the verb *pɛ* 'want'. Examples can be seen in (125) and (126).

(125) *a-sị́* *mí-gà*
C_{1s}.SBJ-say 1s.SBJ.SBJV-move
'She said I should come.' (conv-funeral_100528_7-1)

(126) *a-pɛ* *yi-trɛ* *ní* *níyà* *nì* *níyà* *petee*
C_{1s}.SBJ-want C_{1s}.LOG.SBJ.SBJV-go LOC here and here all
'He wanted to go to both here and here.' (kadzidzia_110409_AB_1)

There are also complement clauses that are marked with the clause linkage marker *xé* 'if/when'. This happens when the content of the complement is presented as uncertain (127).

(127) *mó-te* *xé* *e-tse*
1s.SBJ.NEG-know if C_{1s}.SBJ-die
'I don't know if he died.' (famprob_110401_MeD-BeK_story)

2.8.1.2 Relative clauses

Relative clauses immediately follow their head noun and are introduced with the clause linkage marker *gì*. Subjects, as in (128), objects, as in (129), and adjuncts, as in (130) and (131), can all be relativized in this way.

(128) *ɛ̀ɛ́-pɛ* *ɔ́-nɔ* ***gì*** *e-feke* *dɔ̀mɛ* *nì*
C_{1s}.SBJ.PROG-want C_{1s}-person REL C_{1s}.SBJ-lift.up thing and
ka-sɔi-à=***ɛ***
C_{6s}-basket-DEF=CM
'He is looking for the person who has taken the basket with the things.'
(pear_100624_ElD-JA)

(129) *kɔ* *bɛ-kị*=*wɔ* *bà-sa-à* ***gì*** *ye-ne* *a-kpɛ*
so C_{1p}.SBJ-give=2s.OBJ C_{5p}-cloth-DEF REL C_{1s}.POSS-mother C_{1s}-put
ɛ-kɪ́=*yɛ*=***ɛ***
SVM-give=C_{1s}.OBJ=CM
'So they give you the cloth that her mother gave to her.'
(ablabe_AD-YD)

(130) *lɛ̌* *kíà-kɔ* *lʊlɔ* *nílɔ̀* ***gì*** *kɪ́-ŋa* *li-wè-le*
and 1p.SBJ.POT-take clean there REL 1p.SBJ-eat C_{3s}-day-DEF
'And we will clean up the place where we celebrated the festival (literally: ate the day).' (chiefs-meeting_100619_03)

(131) *kɔ li-pó lɛ́-lɔ̀ **gì** ba-nùvɔ̀-a bɛ-ná lɔ̀*
so C_{3s}-time C_{3s}-DIST REL C_{1p}-child-DEF C_{1p}.SBJ-reach:LOC there
ɔ́-sị = ba li-boeboe
C_{1s}.SBJ.NEG-tell = C_{1p}.OBJ C_{3s}-anything
'So that time when the children reached there, he didn't say anything to them?' (pear_100709_MiA-DQ)

Relative clauses are often followed by the clitic $=E$ which I call clause marker (glossed CM). This clitic assimilates in both vowel height and ATR value to the preceding vowel. It follows several types of subordinate and coordinate clauses and also frequently follows left-dislocated elements (see Section 4.2.3). Examples can be seen in (128) and (129) above.

2.8.1.3 Temporal and conditional clauses

To form temporal and conditional adverbial clauses, the clause linkage markers *gì* and *xé* are used.

When the marker *gì* is used, the events described in the two clauses either happen simultaneously, or the event in the subordinate clause happens before that in the main clause. The temporal clause starting with *gì* usually precedes the main clause, but it may also follow it. An example of a temporal clause with *gì* preceding the main clause can be seen in (132) and an example of a *gì*-clause following the main clause can be seen in (133). Temporal adverbial clauses starting with *gì* usually end in the clause marker, just like the relative clauses discussed in the previous section.

(132) ***gì** ó-dí dzɛ̀ = **ɛ** èɛ́-sa à-kpɛ-là*
REL C_{1s}.SBJ-sit again = CM C_{1s}.SBJ.PROG-hit C_{3p}-hand-DEF
'When he sat down again, he was clapping his hands.'
(maus-drum_100709_Mia-DQ)

(133) *mɔ me-zè ɔ-nùvɔ̀ kporokporo ɔ́-tɔ kò **gì***
1s.CTR 1s.SBJ-be.NONPRES C_{1s}-child round C_{1s}-INDF just REL
*ma-zɛ̌-ŋà ì-klipò-le ɛ-kí ba = **ɛ***
1s.SBJ-REC-eat C_{3s}-witness-DEF SVM-give C_{1p} = CM
'I was only a small child when I functioned as a witness to them.'
(ablabe_AD-YD)

When *xé* is used to mark temporal clauses, it can either have a general temporal interpretation similar to the *gì*-examples in the previous section or it can have a more specific 'before' interpretation, indicating that the event in the subordinate clause follows the event in the main clause in time. This

'before' interpretation can be more clearly indicated by using the phrase *xé ablé ke* (literally: before now the same). Examples (134) and (135) show temporal adverbials with the 'before' sense. These usually occur after the main clause, but there are one or two cases in my corpus that show an occurrence before the main clause.

(134) *blɔ kedana kú-tá-tanì kunu-yè ɔ-wa* ***xé***
1p Avatime.people 1p.SBJ.NEG-INT-be.able funeral-DEF INF-do **before**
kíà-ŋà à-mu-nà
1p.SBJ.POT-eat C_{3p}-rice-DEF
'We Avatime people cannot perform the funeral rites before we celebrate the rice-festival.' (chiefs-meeting_100619_03)

(135) *mɛ mi-vi li-boétɔ* ***xé ablé ke*** *wáà-bìtɛ*
1s 1s.SBJ.SBJV-ask C_{3s}-matter:INDF **before now same** 2s.SBJ.POT-do
bi-dɛ́yà
C_{4p}-thing:PROX
'I would like to ask you something before you do this thing.'
(chiefs-meeting_100619_03)

Example (136) shows the use of the marker *xé* in a more general temporal sense. In this case the times of the main clause and subordinate clause events overlap. These temporal adverbials usually precede the main clause.

(136) ***xé*** *e-tsyi sị̀ yi-di kɔ ɔ-gblaga ɔ-lɪ́ ní*
when C_{1s}-turn COMP C_{1s}.LOG.SBJ-look then C_{1s}-snake C_{1s}-be.at LOC
yoòde
C_{1s}.POSS:back
'When she turned to look, she saw that a snake was following her.'
(kadzidzia_110406_AuA)

Conditional clauses are formed with the marker *xé* alone or with a combination of the markers *xé* and *gì*. In the former case, they are identical in form to the temporal clauses discussed above and exemplified in (136). An example of a conditional clause starting with *xé* can be seen in (137). Example (138) shows a conditional clause with *xé gì*.

(137) ***xé*** *wò-nyime ki-dítɔ*
if 2s.SBJ.PROG-wear C_{4s}-thing:INDF
bɛ-tá-bu=bé wɔ sụ
C_{1p}.SBJ-INT-remove=C_{4p}.OBJ:LOC 2s side
'If you are wearing something they will take it off you.'
(famprob_110401_MeD-BeK_story)

(138) ***xé*** ***gì*** *a-zɛ́-bàsị́=blɔ* *bà-li-à=**ɛ*** *kɔ*
if **REL** C_{1s}.SBJ-IT-show=1p.OBJ C_{5p}-palm.tree-DEF=**CM** then
ki-bu *wa* *sụ=i*
1p.SBJ-remove C_{5p} side=CM
'If he shows us the palm trees, then we'll clear (the bush) around them.'
(conv-ablorme_100715_SO-AS)

Conditional clauses tend to precede the main clause, but there is one example in my corpus of a conditional clause following the main clause. When the conditional clause precedes the main clause, the main clause may start with the conjunction *kɔ* 'then', as in (138) above. Conditional clauses frequently end in the clause marker, just like relative clauses and temporal adverbials starting with *gì*. This can also be seen in (138).

2.8.1.4 Purpose and reason clauses

The complementizer *sị̀* can be used to introduce purpose clauses (139). Purpose clauses can also be marked with the purposive particle *tɔ* (140).

(139) *lóso* *a-ba* ***sị̀*** *yi-bé-di=blo*
so C_{1s}.SBJ-come **COMP** C_{1s}.LOG.SBJ.SBJV-VEN-look=1p.OBJ
lị-vlɛ́ *lɛ́-yà* *tete*
C_{3s}-morning C_{3s}-PROX like.that
'So she has come to see us this morning.' (avopa_100512_1)

(140) *wɔ̀-tá-nya* *ɔ̀-klị-lɔ̃* *ní* *níyà* ***tɔ*** *dzèsi-e*
2s.SBJ-INT-tie C_{2s}-leg-DEF LOC here **PURP** blood-DEF
o-kí-mu
C_{1s}.SBJ-PROH-ascend
'You will tie the leg here so that the blood will not flow up.'
(illness_100616_SO-DS)

Reason clauses begin with the phrase *lese linu sị̀* or in short *lese sị̀*. The longer version is found in elicited sentences, but only once in my corpus of natural discourse. The word *lese* is likely a contraction of *lɛ* 'it' (class 3 singular) and *ese* 'under'. As *nu* is the identificational copula, the long phrase can literally be translated as 'under it is that ...'. An example of its use can be seen in (141).

(141) *be-se* *trɛ* *ní* *ke-pe-a* *mɛ̀* ***lese sị̀*** *ó-nyimemi-yè*
C_{1p}-run go LOC C_{6s}-house-DEF inside **because** C_{1s}-young.man-DEF
tole *a-xwa=ba*
one C_{1s}-call=C_{1p}.OBJ
'They ran to the house because one of the young men called them.'
(FinSto_100614_WE)

2.8.2 Clausal coordination

2.8.2.1 The connector *lɛ̌*

The connector *lɛ̌* is used to conjoin clauses that describe events which have already happened or are ongoing. The two events can follow each other in time, as in (142) or happen simultaneously, as in (143).

(142) Previous: 'Then Atrodze sent his son to Lulu's place to fetch fire. To see what is happening there.'
lɛ̌ *ɔ-nùvɔ̀-ɛ* *a-trɛ* ***lɛ̌*** *bɛ-vɔ* *lị̀-fi̱flị̀-nɛ*
and C_{1s}-child-DEF C_{1s}.SBJ-go **and** C_{1p}.SBJ-mold C_{3s}-t.o.porridge-DEF
xé *bɛ́-kɔ* *ɛ-kɪ́=yɛ*
and C_{1p}.SBJ-take SVM-give=C_{1s}.OBJ
'And the child went, and they molded some porridge and gave it to him.'
(kadzidzia_110406_QM)

(143) Description of a video in which two events happen at the same time.
ɔ-nị̀vɔ̀-ɛ *èé-se* ***lɛ̌*** *ɔ-kàtsì-e*
C_{1s}-child-DEF C_{1s}.SBJ.PROG-run **and** C_{1s}-old.man-DEF
*èɛ́-gà=**ɛ***
C_{1s}.SBJ.PROG-move=**CM**
'The child is running and the old man is walking.' (expsg06 05run-b)

Clauses that are linked with *lɛ̌* often end in the clause marker *=E*, which also occurs at the end of relative clauses and initial temporal clauses (see Section 2.8.1). This can be seen in (143) above.

The connector *lɛ̌* does not always clearly conjoin two clauses; it may also simply indicate continuation of a story. This is for instance the case for the first *lɛ̌* in (142) above.

2.8.2.2 The connector *kɔ*

The connector *kɔ* is used to conjoin clauses that describe events which are not known to have happened or generic events. Like in the case of *lɛ̌*, the

temporal relation between the two clauses is unspecified. An example can be seen in (144), where *kɔ* is used in the description of an event that is planned to happen in the future.

(144) The speaker is explaining what will happen at an event they are planning later that year.

kui-tè *sị̀* *bîà-kpese* *dɔ̀mɛ* *ní* *gbàdzɛmɛ̀* ***kɔ***
1p.SBJ-know COMP 1p.SBJ.POT-start thing LOC Gbadzeme **and**
bɛ-bá *babiakpa=**ɛ***
C$_{1p}$.SBJ-come:LOC Biakpa=**CM**
'We know that they will start the thing in Gbadzeme and then they will come to Biakpa.' (chiefs-meeting_100619_03)

Clauses that start with *kɔ*, like those that start with *lɛ̌*, usually end with the clause marker *=E*, as can be seen in (144).

As is the case for *lɛ̌*, *kɔ* does not always conjoin clauses but may also function to indicate continuation of a story. This occurs for instance in descriptions of planned future events, in instructions and in descriptions of cultural practices. An example from the latter type of text can be seen in line 5 of (145), where the narrator continues her story after a small aside.

(145) An old woman talks about a ritual that used to be performed in the past when two people got married.

1 *kɔ* *ɔ̀-klipò-lo* *kɔ,* *bɛ-tá-vù*
and C$_{2s}$-witness-DEF CTR1 C$_{1p}$.SBJ-INT-hold
wlo-nì=wó *se* *mɔ̀mɔ̀mɔ̀mɔ̀*
bathe-COM=2s.OBJ:LOC C$_7$ ID.very.well
'And as for the witness, they would hold you and bathe you in it (the mix of clay and water) very well.'

2 *ŋwasi* *sị̀* *wu-bemì* *tsyɛ* *wá-mɔ̀* *ebemì*
be.like COMP 2s.SBJ.SBJV-cry ADD 2s.SBJ.NEG-see cry
'You feel like crying but you cannot cry.'

3 (laughs)

4 *ị̀-klipò* *ɛ̀-tɔ* *kɔ* *ì-kume=me*
C$_{2p}$-witness C$_{2p}$-INDF CTR1 C$_{2p}$.SBJ-pain=1s.OBJ
'Some roles I played as a witness were painful (referring to the ritual described above).'

5 ***kɔ*** *mlɛ́-sɛ́=ɛ* *kɔ* *mlɛ-trɛ́* *àmèdzòfɛ* *mɛ́*
and 2p.SBJ-leave=CM and 2p.SBJ-go:LOC Amedzofe inside:LOC
kálà=ɛ
downstream=CM
'Then you would leave and you would go the the downstream side of Amedzofe.' (ablabe_AD-YD)

It is possible to use *kɔ* with a clause that is known to have happened. In such cases *kɔ* is used to indicate the start of a new episode in a story or a new topic of discourse. An example can be seen in line 2 of (146).

(146) 1 *lɛ̌* *kà-tụ̀kpa-a* *a-wɔ̀* *lị-ŋwàfù-nɛ* *mɛ̀*
and C_{6s}-male.goat-DEF C_{1s}.SBJ-remain C_{3s}-forest-DEF inside
xé *ɛ̀ɛ́-sɔ́* *yɛ* *ɔ̀-nyɔ-nɔ* *mɛ̀*
and C_{1s}.SBJ.PROG-hoe C_{1s} C_{2s}-farm-DEF inside
'And the goat was left in the forest and he was hoeing his farm.'

2 ***kɔ*** *e-wè-la* *gì* *bɛ-trɔ* *kị́* *ɔ-kàtsì-e*
and C_{3p}-day-DEF REL C_{1p}.SBJ-put give C_{1s}-old.man-DEF
kunu-yè *e-wè-la* *ɛ-na-ɛ*
funeral-DEF C_{3p}-day-DEF C_{3p}.SBJ-reach-CM
'So the day they set for the funeral of the old man, the day has arrived.' (kadzidzia_110406_QM)

As was mentioned in Section 2.8.1, *kɔ* also frequently occurs at the beginning of a main clause following a temporal or conditional clause (see example (136)).

2.8.2.3 The connector *xé*

The connector *xé* usually indicates a tighter relation between clauses than *lɛ̌* and *kɔ* do. It is often used to conjoin two clauses within a larger subordinate clause, as in (147), where *xé* conjoins two clauses within a temporal adverbial clause (marked off with brackets).

(147) *kɔ* *[gì* *ɔ-nụ̀vɔ̀-ɛ* *e-mu* *kú* *ò-se-lo*
so when C_{1s}-child-DEF C_{1s}.SBJ-ascend arrive:LOC C_{2s}-tree-DEF
mè ***xé*** *adze* *ka-dzɔ̀i-a* *ke-dó* *ò-se-lo* *mè],*
inside **and** witch C_{6s}-bird-DEF C_{6s}-move.out:LOC C_{2s}-tree-DEF inside
ki-plé *e-ple* *àló* *a-pị*
C_{4s}-descend:FOC C_{1s}.SBJ-descend or C_{1s}.SBJ-jump
'So when the child climbed into the tree and the owl came out of the tree, did he climb down or did he jump?' (frog_100719_DQ-PhA)

The events described in the clauses conjoined with *xé* tend to be closely connected, as can be seen in (148). However, there are also examples in which *xé* seems to function exactly like *lɛ̌*, as in (149).

(148) *ba tieglòele be-vù ì-wlà-lɛ* ***xé*** *ba-lɛɛ*
C$_{1p}$ C$_{1p}$.seven C$_{1p}$.SBJ-hold C$_{2p}$-hand-DEF **and** C$_{1p}$.SBJ-stand
'The seven of them were holding hands and standing.'
(FinSto_100517_AB)

(149) 1 *ɔ́-dzɛ tsyɛ ó-gbe kóŋ lɛ̌ a-dḭ̀mɛ*
C$_{1s}$-woman ADD C$_{1s}$.SBJ.NEG-refuse at.all and C$_{1s}$.SBJ-agree
sḭ̀ áà-zè nì yɛ
COMP C$_{1s}$.SBJ.POT-be with C$_{1s}$
'The woman did not refuse at all and she agreed to marry him.'

2 ***xé*** *yɛ nì yɛ bɛ-bḭ̀tɛ ba-trɔtrɔ-à petee*
and C$_{1s}$ and C$_{1s}$ C$_{1p}$.SBJ-make C$_{1p}$-plan-DEF all
'And he and she made all the plans' (kadzidzia_110406_AuA)

Clauses that start with *xé* may end in the clause marker =*E*, as in (150).

(150) *a-dra lḭ̀-gba-lɛ̀* ***xé*** *e-dò=**e***
C$_{1s}$.SBJ-open C$_{3s}$-room-DEF **and** C$_{1s}$.SBJ-move.out=**CM**
'He opened the door and came out.' (FinSto_100517_AB)

As I showed in Section 2.8.1, the connector *xé* is also used to mark temporal and conditional clauses.

2.8.2.4 Other coordinators

The marker *pɔ̀* is used to indicate an adversative relation between clauses, as can be seen in line 2 of (151).

(151) 1 *ńtepɔ̀ bredzima-ɛ ɔ-kpàsḭ̀ ní sḭ̀-wlàwlà-sɛ*
so t.o.snake-DEF C$_{1s}$.SBJ-be.in LOC C$_7$-palm.branch-DEF
mɛ̀
inside
'There was a snake in those palm branches.'

2 ***pɔ̀*** *bá-mɔ̀=ɛ*
but C$_{1p}$.SBJ.NEG-see=C$_{1s}$.OBJ
'But they didn't see it.' (Avatime-history_BB_20110905)

Disjunction can be marked with the marker *àló* or less commonly with the marker *putɔ*. An example of *àló* can be seen in (152).

(152) *kị-hɔ́* *bɛ-tá-hɔ = lɔ* ***àlɔ́***
C_{4s}-grind:FOC C_{1p}.SBJ-INT-grind = C_{2s}.OBJ **or**
bíà-to = lo *ní* *kí-dɛ* *mɛ̀*
C_{1p}.SBJ.POT-pound = C_{2s}.OBJ LOC C_{4s}-mortar inside
'Do they grind it or pound it in a mortar?' (illness_100616_SO-DS)

The markers *àlɔ́* and *putɔ* can also be used for disjoint noun phrases, as in (153)

(153) One speaker mentions that to cure a certain disease, you can use the leaves from a certain plant. Another speaker interrupts and asks:
à-wɔ̀wɔ̀-la ***putɔ̀*** *à-kpa-kpa-là*
C_{3p}-green-DEF **or** C_{3p}-RED-dry-DEF
'Fresh ones or dry ones?' (illness_100616_SO-DS)

The final coordinator to be discussed here is *gì*. As I showed in Section 2.8.1, *gì* is used as a marker of relative clauses and temporal adverbial clauses. These are its most common uses, but there are a few examples of *gì* in which it seems to conjoin clauses, one of which can be seen in (154).

(154) *e-ble = be* *ní* *lị-klụ̀ị-lɛ* *mɛ̀* ***gì*** *á-kɔ*
C_{1s}.SBJ-unwrap = C_{4p}.OBJ LOC C_{3s}-package-DEF inside **and** C_{1s}.SBJ-take
a-kpɛ́ *ò-nugu-lo* *mè*
C_{1s}.SBJ-put:LOC C_{2s}-mouth-DEF inside
'He unwrapped it and put it in his mouth.' (contrexp09_s2_120906)

Future research will need to establish whether examples such as this are really cases of coordination and if so, how the use of *gì* differs from that of other coordinators.

2.9 Summary

In this chapter, I have provided a broad overview of the grammar of Avatime. This background will be useful in understanding the glossed examples in the remainder of this thesis. In addition, several of the grammatical properties I described will be important as a background to the discussion of information structure markers in this thesis. I will briefly summarize the properties that are most important to keep in mind.

In Section 2.2.2 I described Avatime as having three tones: low, high and extra-high. The extra-high tone has a limited distribution. This is useful background information for Chapter 3, where I discuss a tonal focus marker.

In Section 2.3.2, I showed that the noun phrase may end in a NP-final particle. Several of these particles will be discussed in the remainder of this thesis (Chapters 5, 6 and 7). Another aspect of the grammar that will turn out to be important is the fact that verbs are obligatorily marked with a subject prefix (Section 2.5.1). Because of this, lexical subjects are optional. Objects can also be dropped under specific circumstances (Section 2.7.1). The optionality of independent subject and object pronouns has consequences for how left dislocation should be understood (Chapter 4). In Section 2.7.1, I described the constituent order, which will be important for interpreting the focus construction (Chapter 3) and left dislocation (Chapter 4). In Section 2.7.3, I show that question words in content questions are put in clause-initial position and are marked with the focus marker. This is useful background information for Chapter 3 on the focus construction. Finally, the sections on subordinate clauses (Section 2.8.1) and clausal coordination (Section 2.8.2) provide important background information for the discussion on left dislocation within subordinate clauses in Chapter 4.

CHAPTER 3

The focus construction

3.1 Introduction

3.1.1 Focus

The term focus refers to the part of the sentence that contains the main information update. Definitions of focus vary widely, but usually reflect this basic intuition. For instance, focus has been defined as the part of the sentence that is not presupposed (Lambrecht, 1994), the part of the sentence that answers the (implicit) question under discussion (Roberts, 1996), the most important or salient information (Dik, 1997), the relationally new information in the sentence (Gundel & Fretheim, 2004) or the part of the sentence that evokes alternatives (Rooth, 1992). See also Section 1.2.1 for a more detailed overview.

A common way to find out how focus is linguistically marked is to look at answers to content questions. The element in the answer that replaces the question word is generally considered to be in focus, as this is the part of the sentence that provides the information update. In English, the focused element is usually marked with the main accent of the sentence. This can be seen in line 2 of (1), where *zoo* is in focus and in line 2 of (2) where *Sammy* is in focus. The capital letters in the examples indicate the main accents.

(1) 1 A: *Where did Sammy go yesterday?*
2 B: *He went to the ZOO.*

(2) 1 A: *Who went to the zoo yesterday?*
2 B: *SAMMY went to the zoo.*

Languages can mark focus in various ways. They can use intonation, as English does, they can use morphological marking on the focused element and/or on the verb or they can place the focused element in a particular syntactic position. Many West-African languages use morphological marking and/or syntactic displacement strategies (see also Section 1.3.1). An example of morphological marking in the Gur language Byali can be seen in line 2 of (3), where the focus marker *è* follows the focused element. Line 2 of (4) from Yoruba (Benue-Congo) shows a combination of morphological and syntactic marking, with the focused element occurring in sentence-initial position followed by the focus marker *ni*. As will become apparent later in this chapter, the focus construction in Avatime is very similar to that of Yoruba.

(3) 1 A: *ù* *nōndɔ́* *bāārə*
C.SBJ buy.PFV what
'What has (s)he bought?'
2 B: *ù* *nōndɔ́* *bànānā* ***è***
C.SBJ buy.PFV banana **FOC**
'(S)he has bought [bananas]$_{FOC}$.' (Byali: Reineke, 2007, 228)

(4) 1 A: *kí* *lo* *rà*
what FOC:2s buy
'What did you buy?'
2 B: *aṣọ* ***ni*** *mo* *rà*
clothes **FOC** 1s buy
'I bought [clothes]$_{FOC}$.' (Yoruba: Bisang & Sonaiya, 2000, 179-180)

An important difference between languages is that in some languages, focus marking is obligatory in every sentence, whereas it seems to be optional in other languages. In English, every sentence contains a main accent, which means that speakers always have to indicate which element is in focus. The focus construction in Yoruba on the other hand is only used occasionally to mark focused elements. The question asked in example (4) can also be answered without focus marking. The same, as I will show in Section 3.4.2, is true for Avatime. So, elements that are marked for focus in one language may remain unmarked in another language in the same context. Because of this, I make a distinction between the term 'focused' or 'in focus' on the one hand and the term 'focus-marked' on the other hand. The former refers to elements that are pragmatically understood as being in focus (i.e. being the main information update) and the latter refers to elements linguistically marked for focus. Focus-marked elements are always in focus, but elements that are in focus are not necessarily focus-marked.

When focus marking is not obligatory, the question is when and for what purpose is it used? This question has proven difficult to answer. Several authors have associated non-obligatory focus-marking strategies with marking some form of contrast (Vallduví & Vilkuna, 1998; É. Kiss, 1998; Bisang & Sonaiya, 2000; Zimmermann, 2008), but how this notion of contrastive focus is defined differs from author to author and may well differ from language to language, too. I will come back to this in Section 3.4.1. Languages may also possess multiple focus-marking strategies which correspond to different contexts of use (cf. Watters, 1979). This means that more than two types of focus are necessary to account for focus-marking in these languages. Dik (1997) proposes seven distinct types of focus based on different contexts of use. However, as shown by Skopeteas & Fanselow (2010) for two different focus-marking strategies in Georgian, linguistic strategies do not necessarily map onto such preconceived types.

As there are different focus-marking strategies in different languages, and they are not necessarily used in the same pragmatic contexts, it is not clear whether a core linguistic category of focus can be identified. Matić & Wedgwood (2013) argue that focus is not a unified phenomenon and should be seen as a cover term for a number of related pragmatic effects. This means that when studying focus marking in a certain language, it is not enough to label it as focus, or even contrastive focus, based on a few examples. Rather, before any generalizations are made, the full range of uses of the focus markers should be taken into account. This is what I aim to do in the present chapter.

3.1.2 Methods and research questions

The most commonly used method to elicit focus marking is by question-answer pairs. The assumption is that what is asked for in the question will be in focus in the answer. This was shown in examples (1) and (2) above. The common way to use question-answer pairs is to present the consultant with a content question and ask them to answer it in a full sentence. In order to control the answer, the researcher can describe a scenario, provide the answer as a single word or provide a picture based on which the question can be answered.

The advantage of using question-answer pairs is that it is an easy way to manipulate which part of the sentence is in focus. Whichever part of the sentence is represented by the question word will be in focus in the answer. It is also a relatively easy procedure. However, it is clearly not sufficient to use this method only. As I discussed in the previous section, we cannot assume that focus marking necessarily shows up in any given context and if it does

show up, we cannot assume that this is the only way of marking focus. This task is also problematic in that it is rather unnatural, for two reasons. Firstly, the participant is answering a question to which the researcher obviously already knows the answer. Secondly, it seems unnatural to repeat part of the question in the answer when it is also possible to answer with a single word.

To address some of these issues, the method of question-answer pairs can be extended to include a wider range of contexts. The Questionnaire on Information Structure (Skopeteas et al., 2006) provides a long list of such context types, meant to elicit different types of focus. This is a great improvement over the use of content questions only and is likely to shed more light on the availability of different focus-marking strategies. Nevertheless, the procedure is still quite unnatural and it is difficult to convey to consultants what their answer should be without priming of information structure.

A way to get more natural but still controlled discourse is by using pictures and video clips. The Questionnaire on Information Structure contains a number of tasks that make use of picture and video stimuli. There are, for instance, sequences of pictures that form a short story in which contrastive events happen. Descriptions of such events are difficult to elicit with other methods.

The elicitation methods mentioned here are useful to get a systematic impression of the marking strategies that people use in different contexts. They also form an easy way of identifying linguistic forms that are relevant for focus marking. However, to get a complete picture of how focus marking is used, it is necessary to look beyond these predefined contexts and investigate focus marking in non-elicited discourse.

For my research on focus, I have used grammatical elicitation, question-answer pairs and several picture stimuli and linguistic contexts from the Questionnaire on Information Structure. I used these methods in order to get an initial idea of what focus marking looks like and how it can be used. I also used them to investigate whether focus marking is obligatory in certain contexts, a question that is difficult to answer with non-elicited discourse.

On the basis of my elicitation findings, I identified one construction that appears to mark focus. I tagged all occurrences of this construction in my corpus of spontaneous speech, which consists of seven hours of recordings of various genres (see Section 1.4). Based on this corpus, I looked into the syntactic properties of the focus construction. To study the possible scope and functions of focus marking in more detail, I investigated the contexts in which focus marking occurred in a subset of the corpus, in which I tagged cases of focus marking for a number of pragmatic variables (see Section 3.4.3).

In this chapter, I will report the results of these investigations. My main research questions are:

1. What kinds of elements can be marked for focus with the focus construction?
2. Does the element that is marked for focus always correspond to the part of the sentence that is pragmatically in focus?
3. Is focus obligatorily marked in certain contexts?
4. What are the functions of the focus construction?
    - Is the focus construction used for a specific subtype of focus?
    - Is there one definition of focus that can account for all cases of the focus construction?

Section 3.2 deals with the first question, describing in detail what the focus construction looks like and what elements can be marked for focus. Section 3.3 answers question 2, investigating how the scope of focus relates to the focus-marked element. Section 3.4 answers the last two questions, looking into the obligatoriness of focus marking and describing the function of focus marking in discourse. In Section 3.5 I summarize my findings and discuss remaining issues.

3.2 Grammatical properties

3.2.1 The focus construction

The Avatime focus construction consists of three elements that always occur together: (i) the focused constituent occurs in clause-initial position, (ii) the focused constituent is followed by a floating extra-high tone which attaches to its final syllable and (iii) the end of the clause is marked with a high boundary tone.[1]

Example (5) shows a simplified version of the Avatime constituent order as described in Section 2.7.1. The focus-marked constituent occurs in the precore slot: before the subject but following any left dislocated elements. No resumptive pronoun occurs in the canonical position of the focus-marked element. A sentence cannot contain multiple focus-marked elements.

[1] This is only noticable if the final word does not already end in a high tone, so in many cases it cannot be perceived.

(5) Constituent order of simple monoverbal Avatime sentences:
left dislocated elements - focus - subject - verb - object - adjuncts

Example (6) shows a canonical construction compared to the focus construction. In the canonical construction in (6a), the object, *moneda* 'my aunt' follows the verb. It ends in a high tone and the verb, *panì*, ends in a low tone. In (6b) the object is focused. It precedes the verb and the extra-high tone focus marker is attached to the final syllable, resulting in a rising tone from high to extra high. The verb now ends in low-high contour tone[2] because of the final high boundary tone.[3] The canonical position of the object remains empty.

(6) a. *mà-panì* *mo-nedaa*
1s.SBJ-greet 1s.POSS:C_{1s}-aunt
'I greeted my aunt.'

b. ***mo-nedaá*** *mà-panɔ*
1s.POSS:C_{1s}-aunt:FOC 1s.SBJ-greet
'I greeted [my aunt]$_{FOC}$.' (elic-foc_100602_SO)

The tonal properties of the focus construction can be seen in Figures 3.1 and 3.2, which show the pitch contours of the examples in (6). In Figure 3.1 the final syllable of *monedaa* has a high tone, whereas in Figure 3.2 its tone is clearly rising. The final syllable of *panì/panɔ̀* is clearly low in 3.1 and rising in 3.2.

This type of focus construction, with the focused element in initial position and marked with a focus-marking morpheme, is commonly found in Kwa languages (see Section 1.3.1). Avatime differs somewhat from other Kwa languages in the nature of the focus marker: in other languages this is a segmental morpheme (e.g. *yé/é* in Ewe, *na* in Akan) whereas in Avatime it is a tone. It is likely that Avatime used to have a segmental focus marker like other Kwa languages, but that this was lost, leaving only a floating tone. Another difference with some other Kwa languages is that the clause-initial focus position and the focus marker always co-occur: it is not possible to mark an element for focus by fronting only or with the focus marker only. In many other Kwa languages, it is possible to mark certain types of elements for focus using fronting only (Ameka, 2010).

[2]In the linguistic examples in this thesis, I do not transcribe the appropriate contour tones, but just mark the final tone, i.e. extra high in case of the focus marking and high (which is unmarked in my orthography) in case of the final boundary tone.

[3]Apart from the tone, the final vowel of the verb is also different. This is because *panì* is one of a group of verbs which can either end in /I/ or /O/. One of the conditions under which the /O/ variant shows up is when the verb is sentence-final.

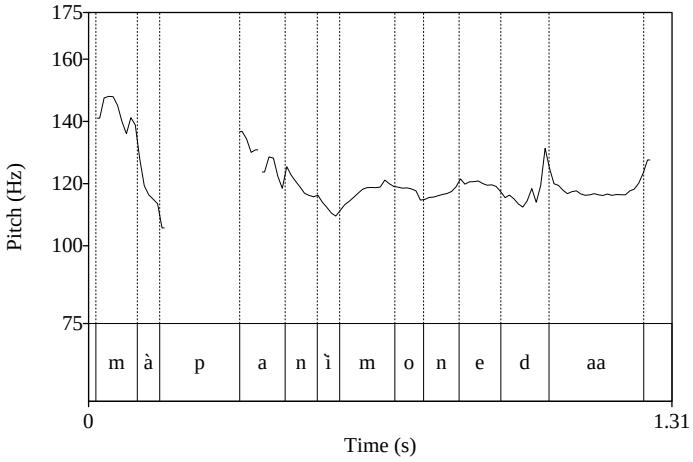

Figure 3.1: Pitch contour of a sentence without focus marking, see example (6a).

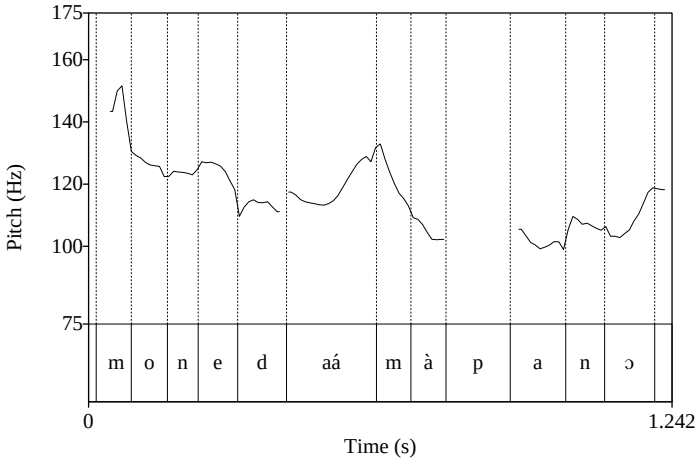

Figure 3.2: Pitch contour of a sentence with focus marking, see example (6b).

The clause-final high tone might be analogous to segmental markers in Ga and Akan (both Kwa languages) which occur clause-finally in focus constructions (Ameka, 2010). In these two languages, the marker occurring at the end of focus constructions is the definite article. In Avatime, it seems unlikely that the clause-final high tone has directly evolved from the definite article, as definite articles in Avatime do not necessarily bear a high tone (the tone can be either high or low, depending on the preceding syllable, see Section 2.3). A more likely hypothesis is that it is related to the enclitic *=E* which occurs at the ends of certain types of subordinate clauses and clause-initial phrases (see Section 2.8).[4] In Ga and Akan, the definite article is also used in these positions, so there still seems to be an analogy between these languages and Avatime.

Example (6) above showed focus marking on the object. Subjects and adjuncts can be marked for focus in the same way. In the case of subjects, there is no change in position and it is only the extra high tone focus marker and possibly the high boundary tone that mark the sentence as a focus construction (7).[5]

(7) ***kedɔnɛ́*** *ɛ̀ɛ́-ŋà* *li-wè-le*
avatime.person:FOC C_{1s}.SBJ.PROG-eat C_{3s}-day-DEF
'[The Avatime person]$_{FOC}$ will celebrate (literally: eat) the festival.'
(chiefs-meeting_100619_03)

Different types of adjuncts can be marked for focus. In (8), a temporal adverb is marked for focus. Other types of adverbs, such as manner adverbs, can also be marked for focus (9).

(8) *agì* ***ɔ̀monó*** *ɪ́-zɛ̌-sɛ* *a-sɪ̣a-nà=ɛ*
and **today:FOC** C_{1s}.SBJ-HAB-tell C_{3p}-lie-DEF=CM
'Is it [today]$_{FOC}$ (only) that she is telling lies?' (implying she always lies)
(conv-rice_110411_3-2)

[4]This clitic may itself be related to the class 1 singular definiteness marker *(y)E*, changing its tonal properties to always bear a high tone.

[5]An interesting question is whether the subject occurs in the regular subject position or in the precore slot like other focus-marked elements. Evidence could be provided by adverb placement: if there are adverbs that can not normally occur between the subject and the verb, but which can occur between the focus-marked subject and the verb, there is evidence that the focus-marked subject is in a different position. Unfortunately I do not have such evidence as adverbs rarely occur between the subject and the verb or between the focus-marked element and the verb.

(9) ***gaglá*** *mɔ-kà* *e-se* *kuní* *ò-hui-lò* *ede*
strong:FOC 1s.POSS:C_{1s}-father C_{1s}.SBJ-run follow:LOC C_{2s}-car-DEF back
'My father ran after the car [very fast]$_{FOC}$.' (elic-adv-placement_110318_SO)

Locative phrases can also be marked for focus, in which case the locative preposition *ní* is left out. An example can be seen in (10a). Here, if the locative phrase *ìselè 'và* 'on plants' occurred in its canonical position at the end of the clause, it would have been preceded by *ní*, as in (10b).

(10) a. *blɔ níyà kɔ* ***ì-se-lè*** ***vá*** *kí-zě-ku*
1p here CTR1 **C_{2p}-tree-DEF** **on** 1p.SBJ-HAB-defecate
'As for us here, we defecate [on plants]$_{FOC}$.' (finsto_100614_WE)

b. *kí-zě-ku* *ní* *ì-se-lè* *avà*
1p.SBJ-HAB-defecate LOC C_{2p}-tree-DEF on
'We defecate on plants.'

Parts of noun phrases or locative phrases cannot be individually marked for focus. To indicate these parts as focus-marked, the entire NP or locative phrase must be focus-marked. This can be seen in (11), where the context indicates that only the possessor is focused, but the entire possessive construction is marked for focus. It is not possible to place only *ónyime* 'the man' in clause-initial position and leave *ɔ̀klị̀lɔ̀* 'leg' in-situ. It is also not possible to attach the extra-high tone focus marker to *ónyime* 'the man'; it can only occur at the end of the entire phrase.

(11) 1 A: 'Did the dog bite the girl's leg?'

2 B: *o* ***ó-nyime*** ***ɔ̀-klị̀-lɔ́*** *kèé-némi*
no **C_{1s}-man** **C_{2s}-leg-DEF:FOC** C_{6s}.SBJ.PROG-bite
'No, it bit the [man's]$_{FOC}$ leg.' (STIS2_100708_MiA)

Question words in content questions are also marked for focus, with the extra-high tone focus-marker attached to the fronted question word. An example can be seen in (12). See also Section 2.7.3 on question formation.

(12) ***nyaŋwɛ́*** *kíà-gà* *tunu* *àbla=ɛ*
who 1p.SBJ.POT-move meet? now=CM
'Who do we meet now?' (conv-ablorme_100715_SO-AS)

Verbs can also be marked for focus. In this case, a copy of the verb root marked with the noun class prefix *kI-* occurs in the clause-initial focus position, while the inflected verb remains in its normal position in the sentence. The clause-initial copy of the verb root is also marked with the final extra

high tone focus marker. Like with argument and adjunct focus, the clause ends in a high tone. An example can be seen in (13), where the fronted copy is marked with bold face and the inflected verb is underlined.

(13) ***kị-hɔ́*** *bɛ-tá-<u>hɔ</u>=lɔ* *àlóʼ*
C$_{4s}$-grind:FOC C$_{1p}$.SBJ-INT-grind=C$_{2s}$.OBJ or
bíà-to=lo *ní* *kí-dɛ* *mɛ̀*
C$_{1p}$.SBJ:POT-pound=C$_{2s}$.OBJ LOC C$_{4s}$-mortar inside
'Do they [grind]$_{FOC}$ it or pound it in a mortar?' (illness_100616_SO-DS)

Several other Kwa languages have a similar verb focus construction in which the clause-initial copy of the verb is nominalized (see e.g. Ameka, 2010). In Avatime, the prefix marking the focused verb is not the regular nominalizing prefix, which is *kU-* (see Section 2.5.5). The prefix *kI-* does not function as a nominalizer in other contexts.

Individual verbs in serial verb constructions (see Section 2.7.4) can be marked for focus. It is usually the first verb of the serial verb construction that is marked for focus. An example can be seen in (14). Note that in this example, the focus is interpreted as taking scope over the entire serial verb construction (see also Section 3.3.2). This is not a necessary interpretation; it can also be just the first verb which is interpreted as focused.

(14) *i-mɔ̀* *àsafò* *ye-bi-à* ***ki-yɔ́*** *bɛ-<u>yɔ́</u>* *sɛ́*
?-see Asafo C$_{1s}$.POSS:C$_{1p}$-child-DEF **C$_{4s}$-get.up:FOC** C$_{1p}$.SBJ-get.up leave
lo
FP
'Look at Asafo's children, they [got up and left]$_{FOC}$.'
(conv-street_100720_2)

Marking the second verb of the serial verb construction for focus is less acceptable. There are no examples in the corpus of spontaneous speech. In elicitation, no consultants spontaneously came up with such constructions, but they accepted (some of) them when prompted.[6] An example can be seen in (15), where in the first clause *mu* 'descend' is used as the second verb in a serial verb construction and is marked for focus.

(15) ***ki-mú*** *a-gà* *<u>mu</u>* *àlóʼ* *a-gà* *ple*
C$_{4s}$-ascend:FOC C$_{1s}$.SBJ-move ascend or C$_{1s}$.SBJ-move descend
'Did he walk [upwards]$_{FOC}$ (literally: move ascend) or did he walk downwards (literally: move descend)?' (elic-verbfocus_100716_SO)

[6] Whether or not focus on the second verb of the serial verb construction is accepted seems to depend on the type of serial verb construction. At the moment, I do not have enough data to investigate this in more detail.

The verb focus construction is also used to mark non-finite verbal complements for focus. This can be seen in example (16), in which the verb *lịla* 'disappear' is the focused non-finite complement.

(16) *lɛ̌ ì-trse-nè gì ì-bìtɛ ŋwa ki-dó*
and C_{2p}-okra-DEF REL C_{2p}.SBJ-do like C_{4s}-move.out:FOC
ì-do kɔ àblɔ kɔ kɔ ***kị-lị̀lá*** *ì-kpese*
C_{2p}.SBJ-move.out then now CTR1 then **C_{4s}-disappear:FOC** C_{2p}.SBJ-start
ɔ̀-lìla tàa
INF-disappear a.bit
'And the okra, which seemed to be [appearing]$_{FOC}$, now it is starting to [disappear]$_{FOC}$.' (conv-street_100720_1)

Altogether, there are 534 cases of focus marking in the corpus of spontaneous speech, which means about 6.7% of the utterances contains a focus-marked element. As can be seen in Table 3.1, objects are most frequently marked for focus, followed by subjects, adjuncts and verbs. The fact that objects are most frequently marked for focus is in line with the idea that objects tend to represent new information whereas subjects of transitive clauses tend to be topics (Du Bois, 1987; Lambrecht, 1994).

Table 3.1: Number of focus constructions in the corpus.

Focused element	Count	Percentage
object	248	46
subject	164	31
adjunct	72	13
verb	50	9
total	*534*	*100*

3.2.2 Focus negation and focus particles

To mark an element as both focused and negated, the marker *aní* can be used together with the focus construction. *Aní* immediately precedes the focus-marked element. There is no negation marking on the verb. An example can be seen in (17). Verb focus can be negated in the same way, as in (18).

(17) *kɔ* ***aní bá*** *bɛ-trɛ́ ɔ̀-nyɔ mɛ́ lo*
then **NEG** **C_{1p}:FOC** C_{1p}.SBJ-go C_{2s}-farm inside FP
'But it was not [them]$_{FOC}$ who went to the farm.'
(famprob_110401_MeD-BeK_story)

(18) *losò* ***aní*** ***ki-dzé*** *kui-dze* *ye* *li-boe*
so **NEG** **C$_{4s}$-forget:FOC** 1p.SBJ-forget C$_{1s}$ C$_{3s}$-matter
'So we have not [forgotten]$_{FOC}$ his matter.' (chiefs-meeting_100619_03)

Although the use of the marker *aní* is the most frequent strategy for negating focus, there are a few examples in the corpus in which negation occurs in a focus-construction with the regular negation marking on the verb, without *aní*. Examples of argument focus (19) and verb focus (20) with regular negation marking can be seen below.

(19) A group of men is talking about plantain trees and banana trees. They mention that the banana tree "moves", i.e. extends its roots under the ground and forms new banana trees. Then one person says:

blàlie ***kó*** *ɔ-í-gà*
plantain **only:FOC** C$_{1s}$.SBJ-NEG-move
'Only the plantain does not move.' (conv-amedzofe_110330_WE-friends_2)

(20) *xé* *gì* ***ki-nú*** *wó-nu=i* *kɔ* *lɛ́* *lɛ́-lɔ̀=ɛ*
when REL **C$_{4s}$-hear:FOC** 2s.SBJ.NEG-hear=CM then C$_{3s}$ C$_{3s}$-DIST=CM
'If you did not [hear]$_{FOC}$ it, then that is that (i.e. it is your problem you did not hear it).' (conv-funeral_100528_9-1)

Regular negation in the focus construction seems to be used when the negation is presupposed, whereas the use of *aní* indicates the assertion of negation.

Focus-marked elements can also be modified by focus particles following the focused element (see also Section 2.3.2.5). Focus particles are elements that indicate something about the relation of the focused element to alternatives (see e.g. König, 1991). There are 116 cases of focus marking in the corpus in which such a particle modifies the focused element. The most frequent particle is *kò* 'only'. Table 3.2 summarizes the occurrences of the different particles. Examples (21) and (22) show the use of *kò* and *boŋ*, respectively. The focus marker always occurs on the particle, which indicates that the particle forms a constituent with the focus-marked phrase.

(21) *li-poé* *lɛ́-lɔ̀* *và=ɛ* ***kà-tùkpa*** ***kó*** *bí-zě-ye*
C$_{3s}$-time C$_{3s}$-DIST on=CM **C$_{6s}$-male.goat** **only:FOC** C$_{1p}$.SBJ-HAB-kill
ní *kunu-ye* *mè*
LOC funeral-DEF inside
'From that time on, they only kill [male goats]$_{FOC}$ at funerals.'
(kadzidzia_110406_QM)

(22) *a-sị̀* *o-nu* *yàwene* *o-tsì-tsì* *pɔ̀* *ŋwásị̀* ***àtsyomusi***
C_{1s}.SBJ-say C_{1s}.SBJ-be Yawene C_{1s}-RED-old but be.like **Atsyomusi**
bóŋ *o-nu* *o-tsì-tsì-e*
rather:FOC C_{1s}.SBJ-be C_{1s}-RED-old-DEF
'She said she is older than Yawene, but it rather appears that [Atsyomusi]$_{FOC}$ (another name for Yawene) is the oldest.'
(conv-rice_110411_3-3)

Most of these particles do not function only as focus particles. They can also occur in canonical constructions, with elements of different information structure statuses. For instance, *kò* can occur clause-finally or after a left-dislocated element, as in (23). Example (24) shows a clause-final use of *kóŋ*.

(23) *kɔ* *níwlɔ̀* ***kò*** *sị̀* *í-di* ***kò*** *ɔ̀-subɔ̀-lɔ* *è-wɔ́lị̀*
so there **just** COMP C_{1s}.SBJ-look **just** C_{2s}-fire.mound-DEF C_{2s}-fall
dɔ́ *li-fu-nè* ***kò***
move.from:LOC C_{3s}-sky-DEF **just**
'So just there, as he was watching, a fire mound fell from the sky.'
(kadzidzia_110406_QM)

(24) *wɔ́-tá-plɛ=kɔ́* *ku-wè-o* ***kóŋ***
2s.SBJ.NEG-INT-put=C_{5s}.OBJ:LOC C_{5s}-sun-DEF **at.all**
'Won't you dry it at all?' (illness_100616_SO-DS)

The exact distributional properties and functions of these particles are not well understood at present and need to be studied in more detail. The additive particle *tsyɛ* and the contrastive particle *pɔ̀* are discussed in Chapters 5 and 6, together with two other contrastive particles that do not modify focus-marked elements. An analysis of the other focus-related particles falls outside the scope of this thesis and will be left for future research.

Table 3.2: Focus-marked elements modified by particles.

Particle	translation	number
kò	only	84
boŋ(wi)	rather	12
tete	only	8
pɔ̀	in contrast	6
kóŋ	at all	3
tsyɛ	also	1

3.2.3 Left dislocation and focus

There are a number of cases of focus marking in which the focused element is followed by a pronoun that agrees with it in noun class and which carries the extra high tone focus marker. These cases can be analyzed as cases of left dislocation where the resumptive pronoun is focus-marked (see also Chapter 4 on left dislocation). There are 63 such cases in the corpus. Examples can be seen in (25) and (26) below.

(25) *kɔ ki-dzya, ki-ŋwàfù-mɛ̀-dzya, **kɛ́** bíà-zɛ̌-kɔ̀ tɔ*
so C_{4s}-meat C_{4s}-forest-inside-meat **C_{4s}:FOC** C_{1p}.SBJ:POT-REC-take cook
ò-ni-nò kí ɔ-pɔ̀pɔ̀-ɛ
C_{2s}-soup-DEF give C_{1s}-new.mother-DEF
'So meat, bush meat, that is what they will be cooking soup with for the new mother.' (illness_100616_SO-DS)

(26) *li-wé lɛ́-lɔ̀ = ɛ, **lɛ́** ɔ́-nɔ kákaa áà-dzị yɛ*
C_{3s}-day C_{3s}-DIST = CM **C_{3s}:FOC** C_{1s}-person every C_{1s}.SBJ.POT-go C_{1s}
sɔ̀lɛ̀mɛ̀ ní yɛ ke-pe-à
church LOC C_{1s} C_{6s}-house-DEF
'That day, it is then that every person will go to his church in his hometown.' (chiefs-meeting_100619_03)

The use of both left dislocation and focus marking can be seen as following Lambrecht's (1994) principle of the separation of reference and role: left-dislocation allows the speaker to first introduce a referent and make sure it is recognized before integrating it into the semantic and pragmatic structure of the sentence.

In some cases, the resumptive pronoun seems to function more like a focus marker in itself, without a pause between the left-dislocated element and the pronoun. An example can be seen in (27).

(27) *agì sɔ̀lɛ̀mɛ̀ **yɛ́** ɔ-lɛ xé ɔ̀-ha-lɔ̀ ɔ̀-lɛ = ɛ*
because church **C_{1s}:FOC** C_{1s}-be.at before C_{2s}-group-DEF C_{2s}-be.at = CM
'Because [the church]$_{FOC}$ is there before its members are there.' (funeral_100531_MM-EM)

It is possible that in some cases the pronoun is added to make the focus marking clearer. Out of the 63 left-dislocated elements with focus-marked resumptive pronouns, 40 are subjects. This is a disproportionally high number, as overall, objects are more often focus-marked than subjects. A reason could be that subjects are more difficult to recognize as focus-marked, because the only indication is the tone on the final syllable of the subject (and

possibly the sentence-final high tone), as opposed to objects and adjuncts, where syntactic position is an additional indicator. This might prompt people to use a pronoun as an extra indication of focus.

The pronoun clearly still has a referential function and is not simply a different kind of focus marker. In elicitation, people were usually happy to use left dislocation with a focus-marked resumptive pronoun (usually without a pause before the pronoun) interchangeably with regular focus marking, except for one case. This was when the focused element was the word 'nobody'. As 'nobody', is non-referential, it cannot be referred to with a pronoun, so the focused resumptive pronoun strategy could not be used. Regular focus marking is possible. This can be seen in example (28).

(28) a. **ɔnɛnɛ* ***yɛ́*** *ɔ́-tré* *sukuu*
nobody **C_{1S}:FOC** C_{1S}.SBJ.NEG-go:LOC school

b. ***ɔnɛnɛ́*** *ɔ́-tré* *sukuu*
nobody:FOC C_{1S}.SBJ.NEG-go:LOC school
'[Nobody]$_{FOC}$ went to school.' (elic-SIS_100626_AB)

In the two GTM languages neighboring Avatime, pronouns are also used in focus marking. In Logba, a distantly related language, focus is usually marked with the segmental focus marker *ká* (Dorvlo, 2009). However, there is one dialect, the Tota dialect, in which this focus marker is not found and instead coreferential independent pronouns follow the clause-initial focused element. In Tafi, the language most closely related to Avatime, there is no morphological focus marker at all. When objects are marked for focus, they occur in clause-initial position without any further marking. To mark subjects for focus, the subject is followed by a coreferential independent pronoun (Bobuafor, 2013). It is conceivable that Tafi once had tonal focus marking like Avatime, but replaced this with the pronoun strategy in order to make subject-focus more recognizable.

3.3 Beyond narrow focus

In this section I discuss focus marking of parts of the sentence larger than a single argument or verb (the entire sentence or the predicate[7]) and on parts of the sentence that are not constituents at all (operators such as tense, aspect, mood and polarity). In these cases, the part of the sentence that is

[7]I use the term predicate in the sense of Lambrecht (1994) to refer to the clause minus the subject. In the context of the current section, the predicate refers to the verb + object or oblique arguments. If the predicate consists only of a verb, it will be marked for focus using verb focus marking as illustrated in Section 3.2.1.

pragmatically understood as being in focus cannot coincide exactly with the focus-marked element, as predicates, sentences and non-constituents cannot be fronted. Before moving on to the Avatime data, I will give a brief overview of the literature.

3.3.1 Theoretical background

Lambrecht (1994) makes a distinction between three focus articulations: sentence focus, predicate focus, and argument or narrow focus. Narrow focus is any focus configuration in which the focus is on a single constituent. Most of the examples presented so far in this chapter are examples of narrow focus. Predicate focus and sentence focus are both types of broad focus in which the focus extends over more than one constituent.

Predicate focus can be elicited by asking a question such as *what did X do?* or *what happened to X?*. An example can be seen in (29). In English, predicate focus is expressed in the same way as narrow focus on the object, with the main pitch accent on the object. According to Lambrecht, predicate focus is the unmarked focus articulation. Most sentences in coherent discourse consist of an element linking the sentence to the previous discourse (the topic) and new information (the focus) predicated about this element. The most common preceding context in the case of predicate focus is not a question, but simply another statement about the same entity. In the case of (29), a more typical preceding utterance could for instance be *I went for a ride in my new car yesterday*.

(29) 1 A: *What happened to your car?*
2 B: *My car/it broke DOWN* (Lambrecht, 1994, 223)

The ambiguity between focus on the object and on the predicate is explained by Selkirk (1995) as focus projection: whenever the internal argument of a phrase is focused, the head is focused, and whenever the head is focused, the entire phrase is focused.

Sentence-focus occurs out of the blue, or as the answer to a question like *what happened?*. An example is (30).

(30) 1 A: *What happened?*
2 B: *My CAR broke down* (Lambrecht, 1994, 223)

Sentences such as these are also called thetic sentences and can be opposed to categorical sentences, which consist of a background part and a focus part (cf. Sasse, 1987). Thetic sentences present the event as a whole, with all

information being equally important. In English, theticity or sentence focus is marked by a pitch-accent on the subject. Lambrecht (2000) shows that marking the subject as prominent is a cross-linguistically common strategy to mark sentence-focus. He explains this as a need to indicate a difference from the unmarked predicate focus configuration. To avoid the default interpretation of a topical subject and a focused predicate, the subject is marked as a non-topic.

Apart from narrow focus, predicate focus and sentence focus, it is also possible to focus on the verb, on the truth value of a sentence or on tense, aspect or mood. Güldemann et al. (2010) refers to these focus types as predicate-centered focus. To avoid confusion with Lambrecht's notion of predicate focus, I will use the term verb-centered focus instead. Focus on the lexical content of the verb is also called state-of-affairs focus and is exemplified in (31). Example (32) shows truth-value focus and (33) shows focus on tense/aspect.

(31) 1 A: *What did the princess do to the frog?*
2 B: *She KISSED it.* (Güldemann et al., 2010, 1)

(32) 1 A: *I cannot imagine that the princess kissed the slippery frog.*
2 B: *She DID kiss it.* (Güldemann et al., 2010, 1)

(33) 1 A: *Is the princess kissing the frog (right now)?*
2 B: *She HAS kissed it.* (Güldemann et al., 2010, 1)

In the remainder of this section, I will discuss how broad focus (Section 3.3.2) and verb-centered focus (Section 3.3.3) are marked in Avatime.

3.3.2 Broad focus

Cases of broad focus are cases in which the part of the sentence that is in focus extends beyond the focus-marked constituent. One might think that the focus construction in Avatime, by isolating and fronting one constituent, always marks narrow focus on the focus-marked element. É. Kiss (1998) shows that in Hungarian, elements in the preverbal focus position can only be interpreted as narrow foci and she argues that this holds true for all languages that use syntactic fronting to mark focus. Data from Avatime shows this generalization to be wrong (see Fanselow & Lenertová (2011) for similar findings for fronted focus in Czech and German). There are three ways in which focus marking on one element can be interpreted as focus on a larger

constituent: object focus interpreted as predicate focus, subject focus interpreted as sentence focus and focus on a single verb interpreted as focus on an entire serial verb construction.

In a subset of 227 focus constructions, there are at least 13 cases in which focus marking on the object is interpreted as predicate focus. Examples can be seen below. In (34), the focus-marked element is *gasɔ* 'bicycle', but there is no relevant alternative to bicycle in question. Rather, the questioner wants to know whether the woman was riding a bicycle or doing something else (e.g. walking), so the entire predicate is understood as being in focus.

(34) *lɛ̌ ɔ́-dzɛ iliyɛ̀ gì a-halị̀ ɔ-nùvɔ̀-ɛ, yɛ tsyɛ*
and C_{1s}-woman C_{1s}.PROX REL C_{1s}.SBJ-bump C_{1s}-child-DEF C_{1s} too
gasɔ́ *ɛ̀ɛ́-kpɛ*
bicycle:FOC C_{1s}.SBJ.PROG-put
'And the woman who bumped into the child, is she also [riding a bicycle]$_{FOC}$ (lit. putting a bicycle) ?' (pear_100630_GoD-FB)

An example in which the focus is clearly not narrow is (35). If the focus was only on (the inside of) the tree, the questioner would be entertaining the possibility that the man climbed into something other than the tree. This is not the case here, as there are no other possible options for things the man could have climbed into to pick pears. Instead, the questioner seems to want to know whether the man climbed into the tree or was standing on the ground. That this is the case is also apparent in the answer to this question, in which the storyteller explains that at first he thought the man was standing on the ground while picking, but later realized that he was in the tree.

(35) A tells B about a man who was picking fruits from a tree. B asks a clarification question:

ò-se-lo ***mé*** *e-mu ku xé*
C_{2s}-tree-DEF **inside:FOC** C_{1s}.SBJ-ascend arrive when
ɛ̀ɛ́-gụ = ba = ɛ
C_{1s}.SBJ.PROG-pick = C_{1p}.OBJ = CM
'Did he [climb into the tree]$_{FOC}$ when he picked them?' (pear_100719_PhA-DQ)

These cases of focus marking on the object with the scope extending over the entire predicate look a lot like focus projection (Selkirk, 1995). Lambrecht (1994) uses the term predicate focus only for the default focus articulation in unmarked sentences. In Avatime, sentences that are not marked for focus can indeed express predicate focus. However, as is shown here, predicate focus can also be marked.

There is no evidence of 'focus projection' in the other direction: there are no cases of verb focus in which the scope of focus extends over the object.

Extension of the focus domain from subject focus to sentence focus occurs only twice in the corpus. One of these cases can be seen in (36). Here, B's utterance does not consist of a focused part and a background part. All information in the sentence is presented as equally newsworthy.

(36) 1 A: *lɛ̌ kɪ́tɛ bɛ-wɔ́ te òmonò=e*
and how C$_{1p}$.SBJ-be.late like.that today=CM
'And why are they this late today?'

2 B: ***ì-le-lé*** *nyàfɛ ì-dò kpaŋwi*
C$_{2p}$-message-DEF:FOC maybe C$_{2p}$.SBJ-move.out plenty
'Maybe there were many messages.' (conv-street_100720_2)

As discussed in Section 3.3.1, the association between subject focus and sentence focus has been observed in other languages too (Lambrecht, 2000). The reason for this association is that marking the subject for focus is a good strategy to indicate that the sentence does not have a predicate focus configuration. Avatime thus behaves like other languages in using this strategy, although it is quite rare in spontaneous discourse.

The final type of broad focus interpretation of a focus-marked constituent that I have encountered in my data concerns serial verb constructions. In these constructions, marking the first verb for focus often results in focus on the entire serial verb construction. An example can be seen in (37), repeated from (14). In A's final line, what she wants to emphasize is that the children left. The fact that they got up before they left, though marked for focus, is not the most important information.

(37) 1 A: *bɛ-dzɛ, ó-dò sɔ̀lɛ̀mɛ̀*
C$_{1p}$.SBJ-go C$_{1s}$.SBJ.NEG-move.out church
'They went, she has not come out of church.'

2 B: *o-í-dò*
C$_{1s}$.SBJ-NEG-move.out
'She has not come out?'

3 A: this time *bá-li-tso dò lósòe xé*
this time C$_{1p}$.SBJ-HAB.NEG-be.early move.out so when
mà-tré lɔ̀=ɛ bíà-kpɛ=mɛ
1s.SBJ-go:LOC there=CM C$_{4p}$.SBJ.POT-put=1s.OBJ
ku-nugu-yò
C$_{5s}$-trouble-DEF
'This time they are not closing early, so when I go there it will trouble me.'

4 A: *i-mɔ̀ àsafò ye-bi-à* ***ki-yɔ́*** *bɛ-yɔ́*
?-see Asafo C_{1s}.POSS:C_{1p}-child-DEF **C_{4s}-get.up:FOC** C_{1p}.SBJ-get.up
sɛ́ lo
leave FP
'Look at Asafo's children, they [got up and left]$_{FOC}$.'
(conv-street_100720_2)

3.3.3 Verb-centered focus

The different verb-centered focus types discussed in Section 3.3.1 can all be expressed in Avatime by marking focus on the verb. In these cases, the focus-marked element can thus said to be larger than the part of the sentence that is interpreted as focused. Only the context can tell whether a focus-marked verb should be interpreted as focus on the lexical content of the verb, focus on the truth value or focus on the aspect/mood. There are no formal differences in marking of these three types.

The most common interpretation of focus marking on the verb is focus on the lexical content, as in (38), repeated from (13), in which grinding is contrasted to pounding.

(38) ***kị-hɔ́*** *bɛ-tá-hɔ=lɔ* *àlɔ́*
C_{4s}-grind:FOC C_{1p}.SBJ-INT-grind=C_{2s}.OBJ or
bíà-to=lo *ní* *kí-dɛ* *mɛ̀*
C_{1p}.SBJ:POT-pound=C_{2s}.OBJ LOC C_{4s}-mortar inside
'Do they [grind]$_{FOC}$ it or pound it in a mortar?' (illness_100616_SO-DS)

There are several cases of focus marking on the verb that are interpreted as focus on the truth value of the sentence. An example can be seen in (39). In this fragment, speaker A is telling speaker B to go and rinse some glasses which she wants to use again. Speaker B indicates that she already washed the glasses. Speaker A challenges this and speaker C joins her. This is reason for speaker B to assert again that she did wash those glasses, this time using focus marking to emphasize the truth of her statement.

(39) 1 A: *zɛ-ha=a* *mɛ̀* *kị́=mɛ*
IT-rinse=C_{1p}.OBJ inside give=1s.OBJ
'Go and rinse them for me.'
2 B: *mà-ha=a* *mɛ̀*
1s.SBJ-rinse=C_{1p}.OBJ inside
'I rinsed them.'
3 A: *wɔ̀-ha=a* *mɛ̀*
2s.SBJ-rinse=C_{1p}.OBJ inside
'You rinsed them.'

4 B: *ee* *me-plò=a* *mɛ̀* *bóŋ*
yes 1s.SBJ-wash=C_{1p}.OBJ inside rather
'Yes, I washed them, rather.'

5 A: *a* *me-dzì* *mɔ̀* *sì* *bị-dɛ́mɛ*
a 1s.SBJ-return see COMP C_{4p}-thing
'Ah, I still see that, this thing (indicating they're still dirty).'

6 C: *a* *mɛ* *tsyɛ* *mɛ̀ɛ́-mɔ́* *te*
ah 1s ADD 1s.SBJ.PROG-see like.that
'Ah, I also see it.'

7 B: ***ki-plo*** ***bóŋ*** *me-plo=ba* *mɛ̀*
C_{4s}-wash **rather:FOC** 1s.SBJ-wash=C_{1p}.OBJ inside
'I [washed]$_{FOC}$ them.' (conv-rice_110411_3-2)

I found two examples of focus marking on the verb being used to indicate focus on the aspect or mood. In example (40), the focus is on the completive aspect, marked by the final particle *pɔ́*, which is contrasted to the suggestion that the action of sharing is not yet finished and could continue. As particles cannot be marked for focus, the verb focus construction is the only way to indicate focus on the completive aspect.

(40) Some women are sitting down at a festive occasion, chatting. One of them (A) finds out some drinks have been shared while she was away for a little while. Some other women start telling the woman who shared the drinks to get more drinks so that A can also have some. Then another woman says to A:

1 *xé* *gì* *wɔ́-ŋwɛ* *tsyɛ* *aní* *liboeboe*
when REL 2s.SBJ.NEG-drink ADD NEG problem
'If you don't drink, it's also not a problem.'

2 ***ki-lɛ́*** *a-lɛ* *pɔ́*
C_{4s}-share:FOC C_{1s}.SBJ-share COMPL
'She [finished]$_{FOC}$ sharing.'

In (41), the focus is on the intentive mood of *bɛtákusi* 'they are going to (intending to) beat him', which is contrasted to the possibility that they have already beaten him.

(41) Two boys are discussing a picture story, in which they see a man in prison, with a thought bubble in which the man is shown as being beaten.

xé *nyàfɛ* *aní* ***ki-kusí*** *bɛ-tá-kusi=ye* *fɛ*
if maybe NEG **C_{4s}-beat:FOC** C_{1p}.SBJ-INT-beat=C_{1s}.OBJ ADD
nyàfɛ *kɪ́lɛ* *gì* *èé-bú* *lɛ* *sụ* *kɪ́lɛ* *gì*
maybe how REL C_{1s}.SBJ.PROG-think:LOC C_{3s} about how REL
be-kusi=ye
C_{1p}.SBJ-beat=C_{1s}.OBJ
'If maybe they are not [going to]$_{FOC}$ beat him, maybe he is thinking about how they beat him (already).' (famprob_110316_MM-AlA)

This section has shown that the part of the sentence that is pragmatically understood as being in focus does not necessarily coincide exactly with the element marked for focus. More precisely, the focused part of the sentence can either extend beyond the focus-marked element, with predicate focus, sentence focus and focus on serial verb constructions; or be a sub-part of the semantics of the focus-marked element, with focus on the truth-value, aspect or mood.

3.4 Functions of focus marking

3.4.1 Introduction

As mentioned in Section 3.1.1, some languages obligatorily mark focus in every sentence while focus in other languages is only occasionally marked. English belongs to the former type: in every sentence, a pitch-accent indicates which part of the sentence provides the main information update. In my Avatime corpus, there are 534 instances of the focus construction. As the total number of utterances in the corpus is about 8000, this means the focus construction is used in 6.7% of the utterances. This raises the question of what the focus construction is used for. If, like English pitch-accents, it indicates the main information update of the sentence, then why does it only do so in some sentences? In other words, what kind of information update does it mark?

A number of different types of focus have been proposed in the literature. A main division is usually made between information focus and contrastive focus or identificational focus. The former is the most unmarked type of focus and occurs in every utterance in which the speaker wants to update the common ground. Contrastive or identificational focus is said to be linked to syntactic focus marking. Identificational focus has been defined by É. Kiss (1998) as indicating that the predicate holds exhaustively for the focused

phrase and not for any other contextually salient alternative. The set of alternatives can be open-ended, as in Hungarian, or closed, as is proposed for Italian, Romanian and Catalan. When the set is closed, the focus is not just identificational, but also contrastive. Other authors define contrast differently. Vallduví & Vilkuna (1998) analyze contrastive focus as a combination of information focus and contrast, where contrast is simply defined as evoking alternatives. Dik (1997, 332) is a bit more explicit about the notion of alternatives and defines contrastive focus as expressing "contrast between the focus constituent and alternative pieces of information which may be explicitly presented or presupposed".[8] Zimmermann (2008, 154) argues that contrastive focus is not related to alternatives, but to hearer expectations. He defines it as follows: "Contrastive marking on a focus constituent α expresses the speaker's assumption that the hearer will not consider the content of α or the speech act containing α likely to be(come) common ground."

Dik (1997) uses contrastive focus as an umbrella term for a number of subtypes of focus. His main distinction within the category of contrastive focus is between parallel focus and counter-presuppositional focus. Example (42) shows parallel focus. In parallel focus, a contrast is made between properties of two entities, times, or places. In this example, *nice* and *boring* are the parallel foci. *John* and *Bill* are the entities being compared and are marked as contrastive topics (see Section 5.3.1).

(42) 1 *John and Bill came to see me.*

2 *JOHN was NICE, but BILL was rather BORING.* (Dik, 1997, p. 326)

In counter-presuppositional focus, the focused element contradicts something that has been previously said or presupposed. This is similar to Zimmermann's definition of contrastive focus as contrary to hearer expectations. An example of counter-presuppositional focus can be seen in (43), where B's utterance challenges what A seems to believe.

(43) 1 A: *John bought apples.*

2 B: *No, he didn't buy APPLES, he bought BANANAS.*

(Dik, 1997, p. 334)

The difference between parallel and counter-presuppositional focus is that in parallel focus, the two sentences that are compared can co-exist within one person's perspective on the world, whereas in counter-presuppositional

[8] Note that defining contrastive focus as involving alternatives is incompatible with the approach taken by Alternative Semantics (Rooth, 1992) in which all kinds of focus are taken to evoke alternatives.

focus the two sentences are incompatible within one perspective and usually involve the assumptions of two people.

The optionality or obligatoriness of contrastive or identificational focus marking differs depending on the context and the language. Identificational focus in Hungarian, for instance, is obligatory in answers to content questions (É. Kiss, 1998). This is unexpected, as such answers are generally thought to be cases of information focus. It is also not clear whether contrastive focus is obligatorily used in contrastive contexts such as the comparison of similar events or correction of an assumption. Zimmermann (2008) presents some examples in which a contrast between alternatives is present, but there is no focus marking. He takes this to mean that contrastive focus should not be explained in terms of alternatives. Skopeteas & Fanselow (2010) carry out a production experiment in Georgian, using question-answer pairs, to find out what types of focus are more likely to be marked. They find that the marked focus construction in Georgian is more likely to be used for contrastive purposes, but can be used in both contrastive and information focus.

Focus marking has also been argued to be obligatory when the subject is in focus. This has been claimed for several Kwa languages by Ameka (2010) and for a large group of Kwa, Gur and West-Chadic languages by Fiedler et al. (2010). The rationale behind this is that in most sentences, the main information update is encoded in the predicate, whereas the subject tends to encode uncontroversial information to which the new information is linked (see Section 3.3.1). Marking focus on the subject is important, because it makes clear to the listener that the sentence does not have this expected information structure. Marking focus on the object is less important, because the object is normally already part of the information update. Skopeteas & Fanselow (2010) find for Georgian that subjects are indeed marked for focus more frequently than objects, but they can remain unmarked in subject-focus contexts.

This subsection has discussed a number of possible functions of focus marking and the extent to which focus marking can be said to be obligatory. In the next three subsections, I will discuss the functions of focus marking in Avatime. In Section 3.4.2 I investigate to what extent focus marking is optional and whether focus is more likely to be marked in some contexts than in others. In Section 3.4.3, I analyze the function of the occurrences of the focus construction in a subset of my corpus of spontaneous discourse. In Section 3.4.4, I discuss how the function of focus marking in Avatime can be defined and how this fits in with the literature on contrastive focus.

3.4.2 Optionality

The context most commonly assumed to trigger focus marking is a content question. Answers to questions are often marked for focus across languages. However, in Kwa languages, answers to questions are often not marked with the focus construction (see e.g. Ameka, 2010). This makes sense from the point of view that answers to questions show information focus, whereas syntactic focus constructions are used for contrastive focus. On the other hand, as mentioned in the previous section, answers to subject-questions have to be marked for focus in some Kwa languages.

To check whether there are tendencies for subject focus and contrastive focus to be marked more often than other types in Avatime, I carried out a small production experiment in which I compared three types of focus: information focus, counter-presuppositional focus and parallel focus. For the first two, I used some of the materials used by Skopeteas & Fanselow (2010) and for parallel focus I used a separate set of pictures. All materials can be found in the Questionnaire on Information Structure (Skopeteas et al., 2006). To elicit information focus, I showed participants a picture and asked a content question about it. To elicit counter-presuppositional focus, I showed participants a picture and asked a polar question about it with a wrong assumption. For instance, when shown a picture of a man kicking a chair, the participants would be asked 'Is the man kicking a table?'. To elicit parallel focus, sets of two pictures were used. In the first picture, participants would see two entities and in the second picture, these entities were involved in an event with two other entities. For instance, they saw a picture of a cat and a dog and would be asked to describe this. Then they would see a picture of the cat biting a woman and the dog biting a man. In this case, there is parallel focus on the woman and/or the man. Within each focus type, both subject and object focus were included. Six people participated in the experiment.

Table 3.3 summarizes the results. These show that none of the investigated contexts leads to obligatory focus marking. When the subject is in focus, we may expect focus marking to be obligatory, but the results show it is not. However, subject focus is clearly marked more frequently than object focus, especially in the case of information focus. The examples below show sentences with (44) and without (45) focus marking on the subject as a response to the same question.

(44) 1 A: 'Who beat the man?'

2 B: *ɔ́-dzɛ* ***yɛ́*** *èé-kúsi* *ó-nyime*
C_{1S}-woman **C_{1S}:FOC** C_{1S}.SBJ.PROG-beat C_{1S}-man
'[The woman]$_{FOC}$ is beating the man.' (STIS3_100708_MiA)

Table 3.3: Proportion of focus-marked subjects and objects in the description of pictures with different types of context.

	Proportion focus-marked		
Type of focus	Picture 1	Picture 2	Mean
information focus			
subject	3/6	6/6	0.75
object	1/6	0/5	0.09
counter-presup. focus			
subject	5/6	-	0.83
object	3/6	-	0.50
parallel focus			
subject	0/6	0/6	0
object	0/6	0/6	0

(45) 1 A: 'Who beat the man?'

2 B: *ɔ́-dzɛ* *e-kúsi* *ó-nyime*
C_{1s}-woman C_{1s}.SBJ-beat C_{1s}-man
'The woman beat the man.' (STIS3_100721_WE)

Object focus is almost never marked in answers to content questions, but when the focus is counter-presuppositional, it is marked more often. An example of marked counter-presuppositional object focus can be seen in (46). Example (47) shows that counter-presuppositional object focus is not obligatorily marked.

(46) 1 A: 'Is the man kicking the table?'

2 B: *o* *aní* ***ɔ̀-kplɔ̀-nɔ́*** *ɛ̀ɛ́-ta,* ***li-gbo-lé***
no NEG **C_{2s}-table-DEF:FOC** C_{1s}.SBJ.PROG-hit **C_{3s}-chair-DEF:FOC**
ɛ̀ɛ́-ta *ɔ̀-klị̀-lɔ*
C_{1s}.SBJ.PROG-hit C_{2s}-leg-DEF
'No, he is not kicking the [table]$_{FOC}$, he is kicking the [chair]$_{FOC}$.'
(STIS2_100525_SO)

(47) 1 A: 'Is the man kicking the table?'

2 B: *o* *ɛ̀ɛ́-ta* *li-gbo-lɛ̀* *ɔ̀-klị̀-lɔ̀*
no C_{1s}.SBJ.PROG-hit C_{3s}-chair-DEF C_{2s}-leg-DEF
'No, he is kicking the chair.' (STIS2_100717_DQ)

The focus construction was never used to mark parallel focus in the experiment. In the parallel settings, two sets of referents were visible. Rather

than marking the focused element(s) as contrasting to an alternative, speakers chose to mark the non-focused set. An example can be seen in line 2 of example (48). Here, the additive particle *tsyɛ* follows 'the dog', which is one of the non-focused entities that are being compared. The additive and contrastive particles and their use in similar constructions will be discussed in more detail in more detail in Chapters 5, 6 and 7.

(48) 1 *ka-drʊ̀ì-a nì púsi-yè ba-di*
C$_{6s}$-dog-DEF and cat-DEF C$_{1p}$.SBJ-sit
'The dog and the cat were sitting.'

2 *púsi-yè èé-míni ɔ-kà-ɛ, ka-drʊ̀ì-a* ***tsyɛ***
cat-DEF C$_{1s}$.SBJ.PROG-lick C$_{1s}$-father-DEF C$_{6s}$-dog-DEF **ADD**
kèé-némi ɔ́-dzɛ
C$_{6s}$.SBJ.PROG-bite C$_{1s}$-woman
'The cat licked the man and the dog (*tsyɛ*) bit the woman.'
(STIS3_100708_MiA)

All in all, the results show that focus marking is not obligatory in any context, but subject focus and counter-presuppositional focus are marked more frequently than object focus, information focus and parallel focus. Parallel sentences were never marked for focus. This could be because focus marking cannot be used in this context, but it is also possible that it is simply dispreferred and with more participants or more items, some cases of focus marking would have occurred. The latter is more likely, because as I will show in Section 3.4.3, the corpus of spontaneous discourse does include some of cases of parallel focus, such as (56). In either case, it is an interesting finding, as parallel focus is suggested to be a subtype of contrastive focus by Dik (1997). If that is the case, it looks like the Avatime focus construction does not simply express contrastive focus, but is used to mark some subtype(s) of contrastive focus.

So far, I have studied the optionality of the focus construction by looking at elicited sentences. As I mentioned in Section 3.1.2, one could object that this procedure is rather unnatural, especially in the case of question-answer pairs. First, consultants are answering questions that the listener (the experimenter) already knows the answer to, and second, consultants are asked to answer the question with a complete sentence, while it might be more natural to provide the answer as a single phrase. Because of these issues, it is useful to see how questions are answered in spontaneous speech.

In my corpus of spontaneous speech, I have identified a total of 83 answered polar questions and 64 answered content questions. Questions that were ignored, got irrelevant answers, or were answered by 'I don't know' are

not counted. A number of the answered questions were answered using multiple sentences or single phrases. As focus marking is restricted to the level of a single sentence, these answers were discarded. This left 38 polar questions and 27 content questions which were answered with a single sentence.

Interestingly, single-phrase answers and single-sentence answers were equally frequent in the corpus. This seems to invalidate the intuition that answering with a single phrase is 'more natural' than answering with a complete sentence. However, a difference between the single-sentence answers to content questions in the corpus and those in elicitation is that the answers in the corpus do not repeat the question. Instead, the answer is usually phrased slightly differently, as in (49).[9] Here, rather than answering with 'I am going to town', the girl mentions that her father sent her to town, from which it can be inferred that that is where she is going.

(49) 1 *lɛ̌ ò-le e-bì ɔ́-dzɛ sị̀ ’fɔ́*
and C_{1s}-crocodile C_{1s}.SBJ-ask C_{1s}-woman COMP where
ɛ̀ɛ́-trɛ na
C_{1s}.SBJ.PROG-go Q
'And the crocodile asked the woman where she was going.'

2 *a-sị yɛ-kà a-kpɛ=yɛ ní*
C_{1s}.SBJ-say C_{1s}.POSS:C_{1s}-father C_{1s}.SBJ-put=C_{1s}.OBJ LOC
ɔ̀-mà-nɔ mɛ̀ sị̀ yi-bu kerɔ̀sini manɔ̀
C_{2s}-town-DEF inside COMP C_{1s}.LOG.SBJ-remove kerosene bring
'She said her father sent her to the town to buy kerosene.'
(kadzidzi-crocodile_PKD_20110924)

In polar questions, the single-sentence answers do usually repeat part of the question, as in (50).

(50) 1 A: *mè-menì=wo di*
1s.SBJ-deceive=2s.OBJ before
'Have I ever deceived you?'

2 B: *ee wò-menì=me ò-di*
yes, 2s.SBJ-deceive=1s.OBJ SVM-before
'Yes, you have deceived me before.' (conv-rice_110411_3-2)

Out of the 38 single-sentence answers to polar questions, 28 were affirmative, as in (50). None of these contained focus marking to indicate the

[9] In this example, the question-answer pair occurs in reported speech, so it does not provide direct evidence of the properties of question-answer pairs. As question-answer pairs are quite rare in the corpus, I decided to include reported speech. With respect to focusing of answer constituents there does not seem to be a difference between direct and reported question-answer pairs.

answer.[10] This makes sense if focus is contrastive, as in affirmation there is no contrasting alternative. Within the 10 negative answers, 6 simply negate the predicate provided in the question, as in (51). These answers do not contain focus marking either.

(51) 1 A: *sɛ li-nyi-nè wo-tè sɛ li-nyi-nè*
C7 C3s-name-DEF 2s.SBJ-know C7 C3s-name-DEF
'Its name, do you know its name?'

2 B: *mó-tè sɛ li-nyi-nè*
1s.SBJ.NEG-know C7 C3s-name-DEF
'I don't know its name.' (illness_100616_SO-DS)

In the other four negated polar questions, the person who answers provides an alternative to the incorrect part of the question. These are similar to the counter-presuppositional focus contexts that I used in the production experiment. In two of those four answers, the element that differs from the question is marked for focus. An example of this can be seen in (52). In the answer, the incorrect part of the question (frying) is replaced. The replacement (cooking rice and beans) is marked for focus.

(52) 1 A: *wɔ-mɔ̀=yɛ gì a-gbà di*
2s.SBJ-see=C1s.OBJ REL C1s.SBJ-fry before
'Have you ever seen her frying (a certain type of food)?'

2 B: *o, ɔ́-gbà di, yɛ kɔ gì* ***watsye***
no C1s.SBJ.NEG-fry before C1s CTR1 REL **rice.and.beans**
dɔ̀mɛ́ *ɛ̀ɛ́-tɔ*
thing:FOC C1s.SBJ.PROG-cook
'No, she doesn't fry (it), as for her, she cooks [rice and beans]$_{FOC}$.
(conv-ablorme_100715_SO-AS)

The answers to content questions contained more cases of focus marking. Out of the 27 single-sentence answers, 8 contained focus marking. Table 3.4 shows what types of constituents these are. As can be seen in the table, there is no type of constituent that is obligatorily marked for focus when it forms the answer to a question.

An example of the answer to a question which is marked for focus can be seen in (53), where the focus-marked element is the subject. Example (54) shows a non-focus-marked subject answering a question. Here, the phrase 'Dodo Kofi' answers the question, but it is not marked for focus.

[10] There was one case of focus marking, but in this case the focus marking also appeared in the question. The focus marking in the answer was a repetition of the focus marking in the question and did not function to mark the answer as an answer.

Table 3.4: Sentential answers to content questions in the corpus of spontaneous speech: distribution of different types of answer constituent and focus marking.

Answer is	total	focus-marked
subject	5	3
object	5	2
location	8	2
verb	1	0
comment	4	0
sentence	4	1
total	*27*	*8*

(53) 1 *lɛ̌ yɛ-kà sị́ nífɔ́ sị̀*
then C_{1s}.POSS:C_{1s}-father say where COMP
a-dɔ-nì lì-fíflì-nɛ na
C_{1s}.SBJ-move.from-COM C_{3s}-t.o.porridge-DEF Q
His father asked him where he got the porridge from.

2 *lɛ̌ sị́ o,* ***àtrodze ye-dzé*** *sị̀*
then say oh **Atrodze** **C_{1s}.POSS:C_{1s}-wife:FOC** COMP
a-kị́=yɛ lì-fíflì-nɛ
C_{1s}.SBJ-give=C_{1s}.OBJ C_{3s}-t.o.porridge-DEF
'Then he said oh, [Atrodze's wife]$_{FOC}$ gave him the porridge.
(kadzidzia_110406_QM)

(54) Two men are thinking of buying some palm trees. Speaker B just mentioned that they should meet a certain person named Adza and then they can start cutting down the palm trees.

1 A: *nyaŋwɛ́ kíà-gà tʊnʊ àbla=ɛ*
who 1p.SBJ.POT-move meet? now=CM
'Who do we meet now?'

2 B: *ee iliyɛ kɔ gi yɛ-*
eeh that.one CTR REL C_{1s}
'Eeh, the one who...'

3 A: *yɔ tɔlɔ aló-*
C_{1s}.CTR himself or
'He himself or...'

4 B: *ɛɛ, kɔ àblaa kɔ ɛɛ, gba=ɛ dɔdɔ kòfi bàsị=blɔ*
eh then now CTR1 eh first=CM Dodo Kofi show=1p.OBJ
bà-li-à
C_{5p}-palm.tree-DEF
'Eh so now, eh, first Dodo Kofi will show us the palm trees.'
(conv-ablorme_100715_SO-AS)

All in all, the conclusions about obligatoriness reached through elicitation hold up when studying question-answer pairs in spontaneous discourse. There is no type of question that is obligatorily answered with a focus construction. Both answers to content questions (subjects or non-subjects) and contrastive answers to polar questions may contain a focused element, but do not have to. The preference for focus marking of subjects as compared to objects does not clearly appear from the corpus study. This could be because there is not enough data (only 5 subjects and 5 objects in total). It could also be because the answers in the corpus, unlike in the elicited data, do not literally repeat part of the question. Perhaps if there is other new information in the sentence, it becomes less obligatory to mark the subject for focus.

Ideally, the obligatoriness of the focus construction should also be studied in contexts other than question-answer pairs. However, these contexts are more difficult to identify in the corpus. Nevertheless, I have come across a few contrastive situations in the corpus that are not marked with the focus construction. One example is (55), repeated from (39). Here, speaker B's first line (line 2) contradicts speaker A's assumption, but she does not use focus marking. Only when speaker A is not convinced and repeats her assumption, this time joined by speaker C, does speaker B finally decide to use focus marking.

(55) 1 A: *zɛ-ha=a mɛ̀ kɻ́=mɛ*
IT-rinse=C_{1p}.OBJ inside give=1s.OBJ
'Go and rinse them for me.'

2 B: *mà-ha=a mɛ̀*
1s.SBJ-rinse=C_{1p}.OBJ inside
'I rinsed them.'

3 A: *wɔ̀-ha=a mɛ̀*
2s.SBJ-rinse=C_{1p}.OBJ inside
'You rinsed them.'

4 B: *ee me-plɔ̀=a mɛ̀ bóŋ*
yes 1s.SBJ-wash=C_{1p}.OBJ inside rather
'Yes, I washed them, rather.'

5 A: *a me-dzì mɔ̀ sị̀ bị-dɛ́mɛ*
a 1s.SBJ-return see COMP C_{4p}-thing
'Ah, I still see that, this thing (indicating they're still dirty).'

6 C: *a mɛ tsyɛ mɛ̀ɛ́-mɔ́ te*
ah 1s ADD 1s.SBJ.PROG-see like.that
'Ah, I also see it.'

7 B: ***ki-plo bóŋ*** *me-plo=ba mɛ̀*
C_{4s}-wash rather:FOC 1s.SBJ-wash=C_{1p}.OBJ inside
'I [washed]$_{FOC}$ them.' (conv-rice_110411_3-2)

This is an indication that focus marking is not simply triggered by a contrastive context, but used purposefully by speakers to emphasize a contrast when they consider it necessary or appropriate.

3.4.3 Functions in discourse

In this section, I look into occurrences of focus marking in my corpus of spontaneous speech and try to determine, based on the context, what focus marking is used for. I study all occurrences of focus marking in a subset of the corpus. This subset consists of 52 minutes of narratives and 53 minutes of conversation. This amounts to 2500 'utterances', containing about 15,000 words. Within this subset, there are 227 cases of focus marking. In 102 of these, the focused element is marked with a particle or negated using the marker *aní* (see Section 3.2.2). These cases are discarded for the present purpose, as I want to concentrate on the function of the focus construction only. This leaves 125 cases of focus marking to analyze.

Based on the previous section and on the literature on syntactic focus marking, the Avatime focus construction can be hypothesized to have some kind of contrastive function. According to the most common definitions, contrast involves alternatives to the focused element (e.g. É. Kiss, 1998; Vallduví & Vilkuna, 1998; Dik, 1997). The set of alternatives to an element is often viewed as everything that could potentially replace it. For practical purposes, this notion of alternatives is not very useful, because there is no way to know whether a speaker has alternatives in mind. To make the notion more concrete, I look only at specific alternatives that are present in the discourse context. I tried to identify for each case of focus marking whether an alternative to the focused element is present in the discourse or can be inferred from it. Within these contrastive cases, I also distinguished between cases of parallel focus and cases of counter-presuppositional focus. As Zimmermann (2008) argues that contrastive focus should not be seen as contrasting alternatives, but rather as contrasting the speaker's utterance to the assumed expectation

state of the hearer, I also checked whether the focus-marked elements could be considered unexpected to the hearer.

In the remainder of this section, I discuss to what extent the Avatime data can be accounted for by the two explanations described above. I show that even though both accounts can explain a number of cases, neither account is sufficient by itself. In Section 3.4.4 I provide a general account that unifies the two functions.

3.4.3.1 Alternatives

Out of 125 cases of focus marking, there are 63 in which a specific alternative (or a group of alternatives) to the focus-marked element has been mentioned in the preceding discourse or can be inferred from it. Out of the remaining cases, 44 do not seem to involve specific mentioned alternatives. In the other 18 cases, it is unclear how to interpret the focus marking.

Alternatives are elements that form a set with the focus-marked element either by virtue of sharing some property with it or by occurring in a similar situation as the focus-marked element in the context. The alternative and the focused element are contrasted to each other with respect to a different set of elements which I will call contrastive background elements. These can be times, locations, participants of the event or beliefs (of different people). They can be explicitly mentioned, but they can also be left to inference. As I mentioned in Section 3.4.1, in the cases of parallel focus, the contrastive background elements are times, locations or participants, whereas in the case of counter-presuppositional focus they are (different people's) beliefs.

Consider example (56). Here, the focus-marked element is Kpeve and the alternative to the focus-marked element is Ho. Kpeve and Ho form a set by virtue of both being towns in the same region. Kpeve and Ho are opposed to each other with respect to the contrastive background elements 'yesterday' and 'today'. Yesterday is linked with the alternative, Ho, and today is linked with the focus-marked element, Kpeve.

(56) *kivòe* *òho* *ì-voi* *òmonò* ***kpevé*** *má-dɔ́*
yesterday Ho C_{2p}-eggplant today **Kpeve:FOC** 1s.SBJ-move.from
'Yesterday (I got) eggplants from Ho, today I came from [Kpeve]$_{FOC}$ (to get eggplants).' (conv-street_100720_1)

This example is a case of parallel focus. The contrastive background elements are times, so the two contrasted propositions can both be true within one person's perspective. Out of the 63 cases of focus marking involving alternatives, 17 are cases of parallel focus. The boundary between parallel

and other types of focus is not always clear though. I will come back to this later.

Another example of a focus-marked element with a specific alternative is (57). In this example, a group of women is being recorded. They are aware of the camera, which is standing at some distance. But apparently, at least one of them had not noticed the microphone standing close by, attached to the camera with a long cable, and she points this out to the others. The focused element is 'this thing' (the microphone) and the camera is the alternative. The contrastive background elements are not overtly expressed, but they are the speaker's previous assumption of the state of the world (in which the camera records the sound) and her updated assumption (in which the microphone records the sound).

(57) During a video-recorded conversation, one of the speakers suddenly notices the microphone, which is positioned close to the speakers, away from the camera.

a	*i-mɔ*	*bi-déyà,*	***bɛ***	***mɛ́***	*ku-nugu-yò*
ah	?-see	C_{4p}-thing:PROX	**C_{4p}**	**inside:FOC**	C_{5s}-talk-DEF
kìí-gà		*ɛ-tré*	*kɔ́lɔ̀*		
C_{5s}.SBJ.PROG-move		SVM-go:LOC	there		

'Ah, look at this thing. [That]$_{FOC}$ is where the talk is passing through to enter there.' (conv-street_100720_1)

The speaker contradicts her previous presupposition, so this is an example of counter-presuppositional focus. As opposed to cases of parallel focus, the two propositions can clearly not both be true within one person's perspective. The majority of focus constructions involving alternatives to the focus-marked element are of the counter-presuppositional type: 43 cases.

Counter-presuppositional focus does not necessarily involve a correction. In (58), the speaker is saying that somebody might steal their t-shirt and pretend to be one of their group in order to get money somewhere by saying they sent him. The focus-marked element *blɔ* 'us' is part of the claim that this thief might make, which contradicts the reality that he 'sent' himself. So here, the (hypothetical) reality is compared to a (hypothetical) false claim.

(58) The speaker is talking about a t-shirt they printed for their old people's association.

1 *xé gì kú-di=ye mɔ̀ xé*
when REL 1p.SBJ.NEG-look=C_{1s}.OBJ good when
ɔ́-nítɔ a-kɔ̀ t-shirtí líyè
C_{1s}-person:INDF C_{1s}.SBJ-take t-shirt C_{1s}.PROX
i-tanì ki-bɔ̀-ɛ zɛ ɔ̀-kútɔ
C_{1s}.SBJ.SBJV-be.able C_{4s}-money-DEF receive C_{2s}-place:INDF
'If we are not careful and somebody took (stole) this t-shirt, he can use it to get money somewhere.'

2 *a-tanì do sị̀ **blɔ́** sị̀ ki-kpɛ=ɛ,*
C_{1s}.SBJ-be.able say COMP **1p:FOC** COMP 1p-put=C_{1s}.OBJ
a-kpɛ t-shirt-yè tsyɛ
C_{1s}.SBJ-put t-shirt-DEF ADD
'He can say that it's [us]$_{FOC}$ who sent him, he can wear the t-shirt (to pretend he belongs to the association and request money).'
(conv-funeral_100528_8-1)

In example (58) one of the contrastive background elements is made explicit with the phrase *atanì do sị̀* 'he can say that'. It is also possible in counter-presuppositional focus to explicitly mention both contrastive background elements. This can be seen in (59), where another woman's claim is compared to the speaker's belief. This is made overt by the phrases *asị̀* 'she said' and *mamɔ̀* 'I believe' (literally: 'I see').

(59) The speaker is talking about a woman who did not wear her new group t-shirt for a group picture, because she had just washed it. The woman justified the washing by saying the shirt was dirty before she got it, but the speaker does not believe this.

*a-sị̀ **bi-dɔ́** sị̀ bi-ku=ye pɔ̀ ma-mɔ̀*
C_{1s}.SBJ-say **C_{4p}-thing:FOC** say C_{4p}.SBJ-enter=C_{1s}.OBJ but 1s.SBJ-see
*sị̀ **ki-kpɛ́** a-kpɛ=yɛ xunyɔ xé e-lulu*
COMP **C_{4s}-wear:FOC** C_{1s}.SBJ-wear=C_{1s}.OBJ CTR3 when C_{1s}.SBJ-be.dirty
'She said [something entered it]$_{FOC}$ but I believe that she [wore]$_{FOC}$ it and it got dirty.' (conv-funeral_100528_8-1)

The two contrasted claims in the subordinate clauses, 'something entered it' and 'she wore it and it got dirty' are incompatible, within one person's perspective, as being the cause of the dirty t-shirt, which is in line with the other examples of counter-presuppositional focus. However, this example also looks like parallel focus, because both contrastive background elements are explicit and the two full sentences, 'she said something entered it' and 'I

believe that she wore it' are compatible; they can both be true. So, in this example, counter-presuppositional focus and parallel focus overlap.

There are also cases in which there is an alternative to the focus-marked element, but there is no counter-presuppositional or parallel interpretation. An example is (60). The focus-marked element, 'village', forms part of a set consisting of 'village' and 'town'. In this case, the speaker does not contradict an assumption or compare two entities or times. He simply selects the appropriate element from the set.

(60) From a story about a family who lived in a village. If they wanted to go to town, they had to cross a big river. To do that, they used a canoe. One day, there were heavy rains and their canoe was washed away.

kɔ lɛ̌ ***kofe*** ***mé*** *ba-lɛ*
so then **village** inside:FOC C_{1p}.SBJ-be.at
'So, they were in the village.' (kadzidzi-crocodile_PKD_20110924)

In all cases discussed so far, there is not just an alternative present in the discourse, but this alternative is also indirectly negated by the focus construction. In (60), the focus on 'village' also emphasizes that they were not in the town (this is important in the story, because they will have to go to town to buy supplies and there is no way to cross the river). In (57) above, the focus on 'this thing' is also meant to convey that the sound is not being recorded by the camera itself.

What I have shown so far is that many cases of focus marking (at least 50%) involve the presence in the context of an alternative to the focus-marked element. This alternative occurs in a similar proposition with respect to a different contrastive background element. The focus marking conveys that with respect to the current contrastive background element, the focus-marked element and not the alternative is true. In most of the cases discussed here, the contrastive background elements are different assumptions or beliefs (counter-presuppositional focus). However, there are also some cases of focus with respect to different times or topical entities (parallel focus). There are also a number of cases in which no alternatives to the focus-marked element can be identified. These cases will need another explanation and will be discussed in the next two sections.

3.4.3.2 Unexpectedness

Zimmermann (2008, 154) claims that "[c]ontrary to what is often assumed in the literature, contrastive foci (...) do not mark a contrast between explicit or implicit alternatives to α in the linguistic context. Rather, they express a

contrast between the information conveyed by the speaker in asserting α and the assumed expectation state of the hearer: a speaker will use contrastive marking on a focus constituent α if she has reason to suspect that the hearer will be surprised by the assertion of α, or by the speech act containing α."

In this way, Zimmermann explains the observation that answers to questions can sometimes contain contrastive focus marking and that situations involving alternatives do not necessarily trigger contrastive focus marking.

Unexpectedness is not easy to identify in a corpus, as the status of something as unexpected is not necessarily overtly expressed in the context. Despite this, I have identified a number of cases in which focus-marking seems to indicate unexpectedness. Out of the 125 cases of focus-marking in the narrow corpus, I have identified 35 cases in which the focus-marked element seems to be unexpected and 19 additional cases in which it seems possible that it is unexpected. In these cases, I did not only look at unexpectedness from the listener's point of view, as in Zimmermann's definition, but also unexpectedness on the part of the speaker. There are 35 cases for which I cannot tell whether the focus-marked element is unexpected and finally there are 37 cases in which the focus-marked element does not seem to be unexpected. Like alternatives, unexpectedness can thus not account for all cases of focus marking. Note that the numbers mentioned here are not related to the cases of alternatives mentioned in the previous section: unexpectedness can apply irrespective of whether or not there is an alternative in the context.

An example of a clear case in which the focus construction indicates unexpectedness is (61). Here, speaker B informs speaker A of how much money a certain man is asking for palm trees he is selling. Speaker B first replies without using focus marking, but then speaker A makes it clear that this is an unexpectedly low amount. As a reply to that, speaker B repeats his answer, this time marking the amount for focus.

(61) 1 A: *lɛ̌ sị tùle tia-sɛ̀*
and say C_{5s}.one C_{1s}-how.much
'And how much did he say one will cost?'

2 B: *o yɔ, xé gì sị kị̀-kị́=yɛ– tù-le tù-le*
o C_{1s}.CTR when REL say 1p.SBJ-give=C_{1s}.OBJ C_{5s}-one C_{5s}-one
xé sị kị́à-kị́=yɛ ŋwa sì àkpe
when say 1p.SBJ:POT-give=C_{1s}.OBJ like COMP thousand
avitetsú te
fifty like.that
'Oh, as for him, if we give him– one, one, if we give him something like fifty thousand.'

3 A: *lɛ̌ yɛ pɔ̀, ki-bɔ́ kɛ́-lɔ̀ kíà-na*
and C_{1s} CTR2 C_{4s}-money C_{4s}-DIST C_{4s}.SBJ:POT-reach
ɔ̀-kútɔ àbla
C_{2s}-place:INDF now
'But as for him, will that money reach anywhere?'

4 B: *o, yɔ ní anùkwarɛ mɛ̀ kɔ yɔ* ***ki-bɔ̀***
no, C_{1s}.CTR LOC truth inside CTR C_{1s}.CTR **C_{4s}-money**
avitetsú *sị yáà-da kù-lị tù-le o*
fifty say C_{1s}.LOG.SBJ:POT-sell C_{5s}-palm.tree C_{5s}-one FP
'Oh, as for him, in truth, he said he will sell one palm tree for [fifty]$_{FOC}$.' (conv-ablorme_100715_SO-AS)

In example (61), no specific alternative to the focus-marked element, 'fifty', is mentioned, so an analysis in terms of mentioned alternatives would not work and an account in terms of unexpectedness is superior. However, in most cases of unexpectedness, there is also an alternative in the discourse context. These are mostly the cases of counter-presuppositional focus as discussed in the previous subsection. Contradicting a presupposition is usually unexpected. An example is (62), in which the focus-marked element in line 6 refers to the aforementioned yellow shea butter, which is also present in the extra-linguistic context.

(62) A notices that B has some yellow shea butter in her bag.

1 A: *bɛ̀ɛ́-bị̀tɛ yɛ́lo yɔkumi dzɛ̀*
C_{1p}.SBJ.PROG-do yellow shea.butter again
'Do they make yellow shea butter too?'

2 B: *ee a-pɛ̀ sanì white-yè*
yes C_{1s}.SBJ-good surpass white-DEF
'Yes, it is better than the white one.'

3 A: *aa sugba*
'Ah, is that true.'

4 B: *kóko*
'Very much'

5 *blɔ gì nɔ́fu ki-zè=e*
1p REL North 1p.SBJ-be.NONPRES=CM
'We who were in the North.'

6 *nɔ́fwanìma tɔlɔ,* ***iliyɛ́*** *bí-zɛ̌-za*
Northerners self, **C_{1s}.PROX:FOC** C_{1p}.SBJ-HAB-use
'The Northerners themselves, [this]$_{FOC}$ is what they use.'
(conv-street_100720_2)

Shea butter is used as a lotion to put on one's skin and is manufactured in the north of Ghana, where speaker B has lived for a while. Speaker A makes it clear that she did not know that yellow shea butter existed and she only knew the white type. White shea butter is thus the alternative to the focus-marked element. Speaker B contradicts speaker A's assumption that there is only white shea butter, making this a case of counter-presuppositional focus. Speaker B probably also assumes that it will be unexpected for speaker A to hear that yellow shea butter is what is used in the north, so this is also a case of focus marking used to indicate unexpectedness.

When focus indicates unexpectedness, this is not necessarily unexpectedness on the part of the hearer, as Zimmermann (2008) suggests. There are also cases in which the speaker seems to indicate that the focus-marked element is unexpected to her, even though it might not be so to the hearer. An example is (22), repeated here as (63). Here, speaker A is wondering who of two old women is older. Speaker B then expresses her surprise that speaker A has to ask her about this, because the old women are from speaker A's own clan. The focus-marked element, *mɛ* 'me' is not unexpected to the hearer (A), but to the speaker (B).

(63) 1 A: *a-sị* *o-nu* *yàwene* *o-tsì-tsì* *pɔ̀* *ŋwásị̀*
C$_{1s}$.SBJ-say C$_{1s}$.SBJ-be Yawene C$_{1s}$-RED-old but be.like
àtsyomusi ***bóŋ*** *o-nu* *o-tsì-tsì-e*
Atsyomusi **rather:FOC** C$_{1s}$.SBJ-be C$_{1s}$-RED-old-DEF
'She said she is older than Yawene, but it rather appears that [Atsyomusi]$_{FOC}$ (another name for Yawene) is the oldest.'

2 B: ***mɛ́*** *we-vì* *gì* *mlɔ* *ò-kume* *dzɛ*
1s:FOC 2s.SBJ-ask REL 2p C$_{2s}$-clan ?
'You are asking [me]$_{FOC}$, while she is from your clan?'
(conv-rice_110411_3)

As I mentioned above, unexpectedness cannot account for all cases of focus marking. The cases in which the focus-marked element is not unexpected are both cases with and cases without a mentioned alternative. The latter cases will be discussed in the next section. An example of a case of focus marking with a mentioned alternative in which unexpectedness does not play a role is (64). In line 1 of this example, 'the sky' is marked for focus, even though the listeners to this story already know (it has been mentioned before) that the vulture lives in the sky. There are also no story characters present at this point in the story to whom this information could be unexpected. The function of focus marking in this example is to contrast the sky to the ground, on which the tortoise lives. The fact that the tortoise lives on

the ground is not overtly mentioned in this segment, but it has been mentioned earlier in the story and moreover it can be inferred from what is said in line 2.

(64) From a story about a vulture and a tortoise who are friends. The vulture invited the tortoise to come to his father's funeral and even though this event took place in the sky, the tortoise managed to come by using a trick. Towards the end of the story, the storyteller mentions that the vulture is confused and had never thought that the tortoise would be able to come.

1 *lese sị̀* ***li-fu-né*** *ɔ-lɛ*
because **C_{3s}-sky-DEF:FOC** C_{1s}.SBJ-be.at
'Because he (the vulture) lives in the [sky]$_{FOC}$.'

2 *ka-samla* *pɔ̀* *ɔ́-lí-prùdù*
C_{6s}-tortoise CTR2 C_{1s}.SBJ.NEG-PROG.NEG-fly
'As for the tortoise, it does not fly.'

3 *kɪ́tɛ* *a-bɪ̀tɛ* *xé* *a-trɛ*
how C_{1s}.SBJ-do when C_{1s}.SBJ-go
'How did he manage to go?' (kadzidzi-turtle_PKD_20110924)

Because the contrastive background elements are participants in the event and are both overtly mentioned, example (64) can be classified as parallel focus.

The cases of focus marking in which the focus-marked element is not unexpected are not restricted to cases of parallel focus. An example of a case of counter-presuppositional focus with an unsurprising focus-marked element can be seen in (65), repeated from (52).

(65) Speaker B suggests that a certain woman might be able to prepare a certain type of food, that few people know how to prepare.

1 A: *wɔ-mɔ̀=yɛ* *gì* *a-gbà* *di*
2s.SBJ-see=C_{1s}.OBJ REL C_{1s}.SBJ-fry before
'Have you ever seen her frying (a certain type of food)?'

2 B: *o,* *ɔ́-gbà* *di,* *yɛ* *kɔ* *gì* ***watsye***
no C_{1s}.SBJ.NEG-fry before C_{1s} CTR1 REL **rice.and.beans**
dɔ̀mɛ́ *ɛ̀ɛ́-tɔ*
thing:FOC C_{1s}.SBJ.PROG-cook
'No, she doesn't fry (it), as for her, she cooks [rice and beans]$_{FOC}$.'
(conv-ablorme_100715_SO-AS)

Here, speaker A does not believe speaker B's claim that a certain woman might be able to prepare a certain type of food. Speaker B then admits that

indeed, he has never seen her prepare this food, he has only seen her cooking rice and beans. Speaker B's claim contradicts the assumption that speaker A seems to have that he has seen her fry this food, so the focus is counter-presuppositional. But the fact that she cooks rice and beans is not unexpected, as she sells this in the street, which everybody in the village knows.

Summarizing, unexpectedness can account for a number of cases of focus marking. Focus marking not only indicates that the speaker thinks the hearer will be surprised, but it can also indicate surprise of the speaker herself. Most cases of unexpectedness can also be accounted for by explaining focus as contradicting a specific alternative. However, there are some cases in which no alternative is present in the discourse context, but the focus-marked element seems to be unexpected. There are also a number of cases in which there are alternatives but the focus-marked element is not unexpected. And there are still a number of cases of focus marking that cannot be explained by either account. I will turn to these now.

3.4.3.3 Other cases

In the cases in which there is no mentioned alternative and no unexpectedness, the function of focus marking seems to be to highlight important information or provide an explanation or solution. In some of these cases, an explanation in terms of negation of unmentioned alternatives can also be envisaged, although this is never clear from the context.

Example (66) shows focus marking being used in an explanation. The focus-marked element indicates the part of the utterance that is explained by the previous story. This does not seem to be unexpected, as it is a well-known fact about spiders that they sit in corners. There is also no relevant alternative to the corner mentioned in the story. However, one could argue that the focus marking is used to exclude all possible alternatives, i.e. the spider sits only in the corner and nowhere else. This is also suggested by the word 'always' in the translation.

(66) The conclusion of a story about a spider.

lɛ́ lósò ***kɔ́nɛ mɛ́*** *dzyàbublò-e e-zě-zè*
C_{3s} reason **corner inside:FOC** spider-DEF C_{1s}.SBJ-REC-sit
'Because of that, the spider is always sitting [in the corner]$_{FOC}$.'
(kadzidzia_110409_AB_1)

In example (67), the contrastive function of focus marking seems to be used to emphasize the importance of the focus-marked element. Here, the speaker is telling a friend how he was making fun of his uncle, who was

catching crabs. His uncle replied that crab is food, with focus marking on food. There is no alternative to food in the context and it is not unexpected, as people in the village regularly eat crab when it is available. What the uncle seems to do here is to use the contrastive function of focus marking to imply that there is an alternative and indicate he dismisses that, conveying a meaning like 'you seem to think crab is something to laugh at but I want to remind you that it is food, i.e. it should be taken seriously'.

(67) The speaker is talking about a time he was working in the field together with a group of people. His uncle was also there and he was catching crabs. As catching crabs is normally not something that older people do, the speaker was making fun of him.

1 *lósò bɛ̀ɛ́-sị̀=yɛ sị̀ ɔ-tɔ́ lɛ́yà*
so C_{1p}.SBJ.PROG-tell=C_{1s}.OBJ COMP C_{1s}-INDF C_{1s}-PROX
'So they are telling him that there are some (crabs) here.'

2 *ɔ̀-wla-lɔ̀ kó e-hle kpɛ́ mɛ*
C_{2s}-hand-DEF only:FOC C_{1s}.SBJ-push put.in:LOC 1s
'He just threw his hands at me.'

3 *o-kóto* ***ki-dɔ̀-ŋa-ŋá*** *o-nu,* *o-kóto*
C_{1s}-crab **C_{4s}-thing-RED-eat:FOC** C_{1s}.SBJ-be C_{1s}-crab
ki-dɔ̀-ŋa-ŋá *o-nu*
C_{4s}-thing-RED-eat:FOC C_{1s}.SBJ-be
'Crab is $[\text{food}]_{FOC}$, crab is $[\text{food}]_{FOC}$.'

(conv-ablorme_100715_SO-AS)

There are only a few cases of focus marking in which a contrastive interpretation does not seem possible. One of these is (68). Here, the focus seems to fill an information gap, as after the first sentence, listeners might be curious about what the speaker said. There is no alternative, no unexpectedness and seemingly no special emphasis.

(68) The speaker is talking about her recent visit to a dying woman.

1 *kɪ́lɛ ma-bị̀tɛ xé mè-do ì-gbè-le ye abà=ɛ*
how 1s.SBJ-do when 1s.SBJ-say C_{2s}-voice-DEF C_{1s} on=CM
'That is what I did and I said something to her.'

2 *lɛ̌ mɛ sị̀ **e-bo** **nyànyàni** **neté** ku-nu*
and 1s say C_{3p}-matter bad person:FOC 1p.SBJ-be
'And I said we are all $[\text{sinners}]_{FOC}$.'

3 *lósò o-zɔ̌-bì kù-tsatsa*
so C_{1s}.SBJ.SBJV-REC-ask C_{5s}-forgiveness
'So she should be asking for forgiveness.' (conv-funeral_100528_7)

Another example is (36), repeated here as (69), where the entire sentence is in focus in answer to a question. There are no mentioned alternatives, no alternatives are excluded and the answer is not surprising. It simply provides the information requested. In this case, a reason for focus marking could also be to prevent the default interpretation of the subject as topical.

(69) 1 A: *lɛ̌ kɪ́tɛ bɛ-wɔ́ te òmonò=e*
and how C_{1p}.SBJ-be.late like.that today=CM
'And why are they this late today?'

2 B: ***ì-le-lé*** *nyàfɛ ì-dò kpaŋwi*
C_{2p}-message-DEF:FOC maybe C_{2p}.SBJ-move.out plenty
'Maybe there were many messages.' (conv-street_100720_2)

In Section 3.4.2 I showed that in a production experiment, subjects were marked for focus more frequently than objects. This means that one might expect the non-contrastive cases of focus marking to be primarily cases of subject focus. This hypothesis is not borne out. Out of the 17 possibly non-contrastive cases, only three mark focus on the subject, two of which are cases of sentence focus, as in (69).

All in all, there are very few cases in which focus marking is clearly non-contrastive. Even in cases that are non-contrastive at first sight, a contrastive interpretation is often possible. One might think that non-contrastive cases are mostly cases of information focus on the subject, but this is not the case: these cases consist of all types of focused constituents.

3.4.3.4 Summary

In this subsection, I have identified three related functions that the focus construction in Avatime can have in spontaneous discourse:

1. Contrast to an alternative:

   - There is a contextually relevant alternative to the focus-marked element which is mentioned in the discourse context or can be inferred from it.
   - The contrast is with respect to a set of contrastive background elements. The focus-marked element is said to be true with respect to one of these and the alternative is presupposed to be true with respect to the other. The contrastive background elements may be mentioned but may also be implicit.

  - If the contrastive background elements are times, locations or participants in the event, the two propositions are compatible (within one person's perspective) and the focus is *parallel*
  - If the contrastive background elements are different versions of reality, the two propositions are not compatible and the focus is *counter-presuppositional*

2. Excluding alternatives:

   - If there is contrast to an alternative as described above, this means that a particular alternative to the focus-marked element is excluded from replacing the focus-marked element, i.e. the proposition with the focus-marked element replaced by the alternative is not true.
   - In some other cases, focus marking indicates that all (unspecified) alternatives are excluded.

3. Unexpectedness:

   The speaker treats the focus-marked element as less likely to occur within the current background than (mentioned or unmentioned) alternatives.

These three functions can co-occur, but it is also possible that only one or two are relevant in a given case of focus marking. When focus marking indicates contrast to a given alternative, this alternative is also excluded from replacing the focus-marked element within the same background. There are a few cases in which there is no specific alternative, but there is still exclusion of alternatives, i.e. the focus marking seems to indicate all alternatives are excluded. Unexpectedness can explain some cases that cannot be explained with reference to specific alternatives, but in many cases it overlaps with the function of contrast to an alternative. There are also cases in which there are alternatives but unexpectedness does not seem to play a role. Finally, there are also some cases in which none of these functions seem to play a role, though these are very rare.

3.4.4 A general account

In the previous sections, I have investigated the functions of focus marking in Avatime. One question was whether there are contexts in which focus marking is obligatory. I addressed this by looking at question-answer pairs both in a production experiment and in spontaneous discourse. I did not find

any contexts in which the focus construction is obligatory. However, there are contexts in which focus marking is more or less likely to occur. When the subject of the clause provided the answer to the question, focus marking was much more likely than when the object provided the answer. This is in line with Fiedler et al.'s (2010) finding that in a sample of eight Kwa languages, nine Gur languages and seven Chadic languages, subject focus was always obligatorily marked in the context of a subject content question. However, in Avatime this seems to be a tendency rather than a rule. Focus marking was also more likely to occur in counter-presuppositional contexts than in parallel contexts or in answers to content questions.

The preference for contrastive (counter-presuppositional) contexts is reflected in the corpus. Within the cases of focus marking that I analyzed, information focus was very rare, parallel focus was relatively rare and counter-presuppositional focus was most common. The preference for subjects is not reflected in the corpus. Overall, objects are more frequently focus-marked than subjects (see Section 3.2.1). Even within the cases of non-contrastive focus, subject focus is not very frequent. This could simply be because pragmatic contexts for subject focus are much less common than those for object focus, i.e. whenever the right pragmatic context is there (as in subject content questions), the subject will be focused. It could also be that the preference for subject focus does not extend beyond question-answer pairs, which are relatively rare in spontaneous discourse. Out of all 534 cases of focus marking in the entire corpus of spontaneous discourse, only 10 occur in the answer to a question. This also shows that concentrating on question-answer pairs when investigating focus marking can be misleading when trying to understand the function of focus marking.

Based on a detailed study of the context of focus constructions in spontaneous discourse, I have suggested three related functions of focus marking in Avatime: contrast to alternatives, excluding alternatives and indicating unexpectedness. All three of these are similar to definitions of focus marking that have been suggested in the literature, but do not exactly match these.

Focus-marking is often related to alternatives in some way, although alternatives are most frequently used in the sense of an unbounded set of elements that could possibly replace the focused element (see e.g. Rooth, 1992). The Avatime focus construction, on the other hand, seems to be used when specific alternatives that are present in the context are relevant.

Focus marking as excluding alternatives is suggested by É. Kiss (1998, 245). She defines the function of focus marking in Hungarian (and by extension in all languages which use syntactic fronting for focus marking) as excluding alternatives. She seems to interpret the alternatives as an unbounded

set (even though in her definition she talks about "contextually or situationally given elements"). In Avatime, even though focus marking seems to indicate exclusion of alternatives most of the time, there are only a few cases in which all possible alternatives are excluded. Most of the time, the exclusion is restricted to a specific alternative.

Focus marking as an indication of unexpectedness has been proposed by Zimmermann (2008). He argues that focus marking in West-Chadic languages (and by extension all constructions in other languages that have been claimed to express contrastive focus) is related to hearer-expectations. Focus marking is used when the speaker assumes that the focus-marked element is unexpected to the hearer. In Avatime, this account can explain a number of cases of focus marking, but not all. Moreover, the notion of unexpectedness as observed in Avatime is more general than just unexpected to the hearer. Focus marking can also be used to indicate surprise on the part of the speaker.

The functions of unexpectedness, contrast to alternatives and excluding alternatives can all be accounted for by the general definition of focus as indicating the element of the sentence that updates the common ground. As mentioned earlier, such an account seems too general, as most sentences contain a common ground update but no focus marking. However, if the focus construction explicitly signals that the common ground is updated, this does not necessarily mean it should be used whenever a common-ground update takes place.

Unlike English, where every sentence must contain a main pitch accent, Avatime only has a marked construction to signal that a certain element updates the common ground. Along the lines of Levinson's (2000:136) M-principle that "what is said in an abnormal way indicates an abnormal situation", the focus construction will only be used when the common ground update is potentially controversial and needs to be highlighted. Normally, focused information is simply information that is newly added to the ongoing discourse. This type of common-ground update does not need to be marked. When focus marking is used, the speaker indicates that the addressee needs to pay special attention to this common-ground update. This often implies that some part of the common ground needs to be changed, as in the case of counter-presuppositional focus and unexpectedness. Information is not simply added, but previously known information needs to be changed. In the case of negation of a previously mentioned alternative, the highlighting draws attention to the fact that the common-ground update differs from what was said about a related background element. This way, the different functions discussed in the previous section, arise out of the implications of

drawing the addressee's attention to the common-ground update. This explanation can also account for the tendency to mark subjects for focus in the answers to content questions: the subject does not normally update the common ground so it is highlighted to indicate that the situation differs from the usual case.

The Avatime focus construction thus instantiates one of the basic notions of information structure proposed in the literature: marking the main information update. The more specific interpretations that the focus construction usually has, are due to implicature resulting from the fact that the focus construction is a marked construction.

3.5 Summary

In this chapter, I have discussed the grammatical properties, scope-taking properties and functions of the Avatime focus construction.

In Section 3.2 I answered the question what kinds of elements can be marked for focus with the focus construction. The Avatime focus construction can be used to mark subjects, objects, adjuncts and verbs for focus. Parts of subjects, objects or adjuncts cannot be independently focus-marked. Focus-marked elements can be negated by using the marker *aní* and they can be marked by several particles such as *kɔ̀* 'only' and *boŋ* 'rather'. It is possible to mark the resumptive pronoun of a left-dislocated element for focus.

In Section 3.3 I looked into the scope of focus marking. I showed that the constituent that is marked for focus does not always correspond to the part of the sentence that is pragmatically in focus. Focus marking on the object can be interpreted as focus on the predicate, focus marking on the subject can be interpreted as sentence focus and focus marking on one verb of a serial verb construction can be interpreted as focus on the entire serial verb construction. This resembles Selkirk's (1995) notion of focus projection and contradicts É. Kiss's (1998) claim that syntactic focus constructions cannot involve focus projection. Focus marking on the verb is usually interpreted as focus on the lexical content of the verb, but can also be interpreted as focus on aspect, mood or truth value.

In Section 3.4 I looked into whether focus is obligatorily marked in certain contexts and what the functions of the focus construction are. I found that there do not seem to be any contexts in which focus marking is obligatory. This finding contradicts claims that subject focus is obligatorily marked in Kwa languages and other West African language families (Ameka, 2010; Fiedler et al., 2010). Focus-marking is more likely in some contexts than others: it is most likely when the subject is in focus and when the focus

is counter-presuppositional. In Section 3.1, I asked whether the focus construction is used for a specific subtype of focus. If only previously proposed subtypes of focus are considered, the answer is no: there is no subtype of focus that maps exactly onto the Avatime focus construction. However, the notions of alternatives, exclusion of alternatives and unexpectedness, all considered to be relevant for focus marking in the literature (Vallduví & Vilkuna, 1998; É. Kiss, 1998; Dik, 1997; Zimmermann, 2008), all seem to play a role. Rather than analyzing the focus construction as encoding some complex notion of contrast, I suggested contrast arises as an implicature. Focus-marking simply draws the addressee's attention to the main information update of the sentence. However, because the focus construction is optional, using it implies that there is something special about the information update, i.e. it differs from an expectation, presupposition or from previously mentioned information.

CHAPTER 4

Left dislocation

4.1 Introduction

Left dislocation is a phenomenon that occurs in many languages of the world. Properties that are often said to identify left dislocation are (i) the occurrence of an element in sentence-initial position, (ii) an intonation break following this element and (iii) the remainder of the sentence contains a crossreference to the left dislocated element (a resumptive element). An English example can be seen in (1) where the phrase *this spot in the rug* is left-dislocated and *it* resumes it in the remainder of the sentence.

(1) *This spot in the rug, you better get it out before the party on Saturday.*
(Gundel, 1975, 72)

In several languages, left dislocation can be distinguished from topicalization, a construction in which an element occurs in sentence-initial position without being crossreferenced by a resumptive pronoun later in the sentence. An example of topicalization in English can be seen in (2).

(2) *The necklace of coral beads she inherited when a friend died.*
(Prince, 1998, 292)

As the most salient difference between left dislocation and topicalization is the presence or absence of a resumptive pronoun, resumptive pronouns have often been treated as the defining characteristic of left dislocation[1]. In

[1]There may also be prosodic differences between the two types of constructions, but this has not been studied systematically. In a comparison of left-dislocated and in-situ subjects in French, Avanzi et al. (2010) do not find a significant difference in prosodic pattern. Whether this finding extends to other languages and to topicalization remains to be investigated.

previous research (Matić et al., in press), we show that defining left dislocation based on resumptive pronouns is problematic when studying languages that make use of zero anaphora or head marking. We argue that it is better to establish on a language by language basis whether something like left dislocation can be distinguished from other constructions and if so, by which criteria. This is what I will do for Avatime in this chapter.

Because of the resumptive pronoun, which essentially makes the remainder of the sentence a full-fledged clause, and because of the prosodic break that often sets left dislocated elements apart, left dislocated elements have been analyzed as occurring outside of the clause. In some syntactic frameworks, this means that left-dislocated elements are linked to the remainder of the utterance by discourse linking, as if they occurred in a previous sentence (Cinque, 1997; Shaer, 2009). This has been called the orphan analysis of left dislocation (Shaer, 2009). In the framework of Role and Reference Grammar (RRG), there is a level of representation that is larger than a clause but still one level below discourse linking: the sentence. Within the sentence, but outside the clause, there is a left-detached position (LDP) which hosts left dislocated elements (Van Valin & LaPolla, 1997; Van Valin, 2005). See Figure 4.1 for an overview of RRG sentence structure. In contrast, topicalization is analyzed as intraclausal on both accounts (in RRG, topicalized elements are in the Pre-Core Slot (PrCS)).

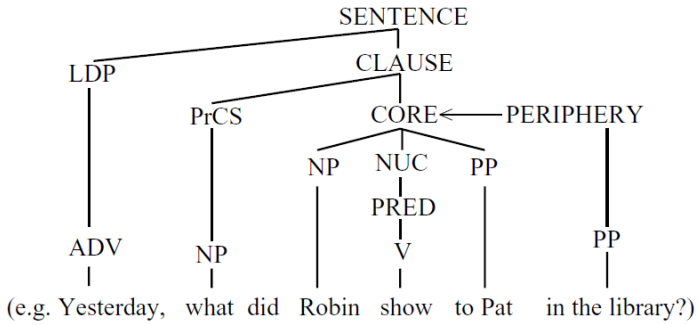

Figure 4.1: RRG sentence structure, from Van Valin (2005, p.15).

Because of its extra-clausal nature, left dislocation is expected to be impossible within subordinate clauses. Whether this is indeed impossible or not is still a matter of debate. Several authors (Emonds, 1970; Ogle, 1981) have argued that left dislocation is not allowed within subordinate clauses in English. However, others (Hooper & Thompson, 1973; Gundel, 1975; Hirschbühler, 1997; Shaer, 2009) claim that within some types of subor-

dinate clauses left dislocation is allowed. Most of these studies are based on grammaticality judgments. These are not very reliable for a pragmatically marked construction such as left dislocation and it is thus no surprise that even different studies of the same language show different results. No systematic corpus studies have been done to check whether left dislocation occurs in subordinate clauses and if so what kind of constraints there are. In this chapter, I will discuss examples from the Avatime corpus that show left dislocation in subordinate clauses and I will suggest how these can be accounted for.

Left dislocation has been claimed to have various functions. The main functions that have been proposed for left dislocation in English are referent introduction or re-introduction and indicating contrast or set membership (see e.g. Ochs Keenan & Schieffelin, 1976; Lambrecht, 1994; Geluykens, 1992; Prince, 1998). Explanations for why left dislocation would be used to introduce referents differ, but several studies show that the left dislocated referent is often the discourse topic of the subsequent discourse (Givón, 1983; Geluykens, 1992; Gregory & Michaelis, 2001). There is also no agreement as to whether left dislocation has one unified function or multiple unrelated functions.

In Kwa languages, left dislocation has not been studied much. The clause position for frame topics as described by Ameka (2010) corresponds to left dislocation: frame topics occur sentence-initially, are often followed by a prosodic break and may be crossreferenced by a resumptive pronoun in the remainder of the sentence. Ameka describes the function of a frame topic as providing background information that should be kept in mind for the interpretation of the rest of the utterance. He also mentions that frame topics are marked by a dedicated morpheme that functions as a topic marker. An example, from Ga, can be seen in (3).

(3) *mí !é, shìká nì è-há !mí*
1s TOP money FOC 3s.SBJ-give 1s
'As for me, he gave me [money]$_{\text{FOC}}$.' (Ga, adapted from Ameka, 2010, 143)

In this chapter, I will describe the form and function of left dislocation in Avatime. The main questions I will answer are:

1. What are the grammatical properties of left dislocation and how can left dislocation be identified?

2. What are the constraints on the occurrence of left dislocation within subordinate clauses and how can cases of left dislocation within subordinate clauses be accounted for?

3. What are the functions of left dislocation?

The investigation will mostly be based on a subsection of my Avatime corpus in which all left dislocated elements are annotated and tagged for several grammatical and informational properties. This subsection of the corpus consists of almost 2 hours (about 2600 'utterances', 14,000 words) of discourse of various genres: folk tales, conversation, public meetings and interviews about cultural practices. Grammatical elicitation (translation of English sentences and grammaticality judgments of constructed sentences) was used to complement the corpus examples in a few cases.

In Section 4.2, I will address question 1 above and discuss the grammatical properties of left dislocation. In Section 4.3 I will discuss the occurrence of left dislocation within subordinate clauses and address possible explanations (question 2). In Section 4.4, I will discuss the functions of left dislocation (question 3). I will conclude and discuss remaining issues in Section 4.5.

4.2 Grammatical properties

4.2.1 Identifying left dislocation

Like left dislocation in other languages, left dislocation in Avatime is characterized by sentence-initial position, frequently a prosodic break between the left-dislocated element and the remainder of the utterance and possibly a resumptive element. An example can be seen in (4). Here *ɔ́dzɛ yɛ fótoà* 'the woman's photos' occurs in sentence-initial position and is crossreferenced in its canonical postverbal position by the resumptive pronoun *ba*. In this example and following examples, the left-dislocated element is indicated by bracketing. Resumptive elements are indicated by bold face.

(4) [*ɔ́-dzɛ* *yɛ* *fóto-à*] *bɛ-zɛ̀* ***ba*** *pɔ́* *a*
C$_{1s}$-woman C$_{1s}$ photo-DEF.C$_{1p}$ C$_{1p}$.SBJ-receive C$_{1p}$ COMPL Q
'The woman's photos, have they collected them all?'
(conv-funeral_100528_8-1)

Sentence-initial position means that left dislocated elements precede the subject and if present the focus-marked element. This is illustrated in (5), a simplified version of the constituent order presented in Section 2.7.1. In the Role and Reference Grammar framework, this means left dislocated elements occur in the left detached position (Van Valin, 2005, 6).

(5) Constituent order of simple monoverbal Avatime sentences:
LD elements - focus - subject - verb - object - adjuncts

The left detached position can clearly be distinguished from the position for focus-marked elements (the precore slot, see Chapter 3). Focus-marked elements are always marked with the focus marker, which is an extra high tone that is realized on the final syllable of the focused phrase. Left-dislocated elements are never marked with this extra high tone. Another difference is that focus-marked elements are never crossreferenced in the remainder of the sentence whereas left-dislocated elements often are. A third difference is that there can be only one focus-marked element in the sentence, whereas multiple left dislocated elements are possible (6).

(6) [*bá-nɔ̀-a* *gì* *be-di* *ɔ́-nɔ̀-ɛ* *sụ=i*]$_{i}$ [*ki-bɔ́*
C_{1p}-person-DEF REL C_{1p}.SBJ-sit C_{1s}-person-DEF side=CM C_{4s}-money
'é-lɔ̀ *kɔ*]$_{j}$ ***bíà***$_{i}$*-lɛ=**kɛ***$_{j}$
C_{4s}-DIST CTR1 C_{1p}.SBJ.POT-share=C_{4s}.OBJ
'The people who sit next to the (dead) person, as for that money, they will share it. (funeral_100531_MM-EM)

The prosodic properties of left dislocation have not been investigated in detail, but there is often a clear break between the left dislocated element and the remainder of the sentence. However, there are also cases in which there is no pause and seemingly no other cues for a prosodic break. This is the case in (4) above, the pitch contour of which can be seen in Figure 4.2. No pause, lengthening or intonational changes can be observed between *fótoà* and *bɛzɛ*.

An example of left dislocation in which there is a clear break is (7). Here, both *yɛ̀fɔnaɛ* and *nì kluwuɣɛ* are separated from what follows by a pause. The second pause separates the left dislocated element from the remainder of the sentence. This can be seen in the pitch contour in Figure 4.3. There is a prosodic break in 68% of the corpus cases of left dislocation.

(7) [*yɛ̀fɔna-ɛ* *nì* *klúwu-yè*], ***bá*** *bí-zě-tu* *tsà*
white.person-DEF and Kru-DEF C_{1p}:FOC C_{1p}.SBJ-HAB-be.first harvest
gba
first
'The white person's (rice) and Kru (rice), those are harvested first.'
(rice_100613_EN-MM)

Resumptive elements are obligatory when they are necessary to make the clause following the left dislocated element grammatical. This is for instance the case if the left dislocated element is a part of a noun phrase

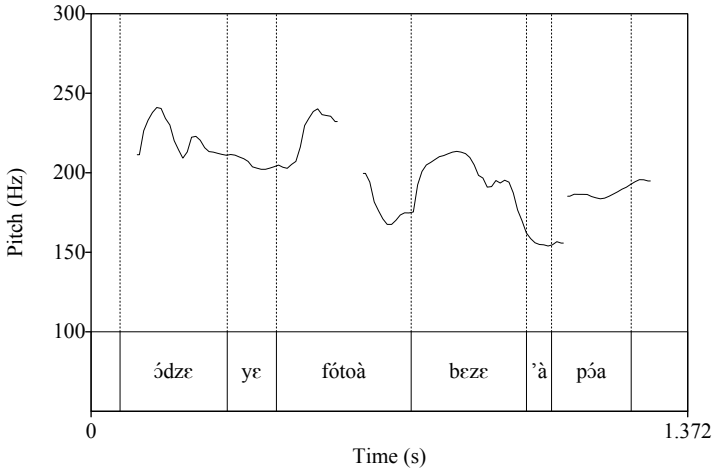

Figure 4.2: Pitch contour of the sentence in example (4), a sentence with left dislocation but no prosodic break.

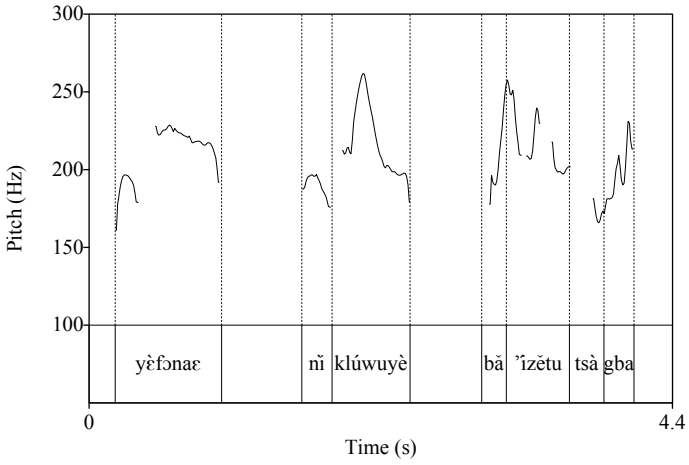

Figure 4.3: Pitch contour of the sentence in example (7), a sentence with left dislocation and a clear prosodic break.

or an adpositional phrase. Example (8) shows left dislocation of part of a prepositional phrase.

(8) *lósò* [*ká-lɔ̀ xunyɔ*], *ma-wà à-xwɛ̀-na ní* ***ka*** *sụ*
so C_{6s}-DIST CTR3 1s.SBJ-do C_{3p}-work-DEF LOC C_{6s} side
'So as for that one, I am working on it.' (chiefs-meeting_100619_03)

In cases where zero anaphora are allowed, a resumptive pronoun is not necessary. This can be seen in (9), where we would expect a pronoun cross-referencing the object *sàprada* 'onion' following the verb. Altogether, out of 67 cases of left dislocated objects and oblique arguments, 7 are not crossreferenced with a resumptive pronoun.

(9) [*sàprada kɔ*] *òmonò kɔ ɔ́nɛnɛ ó-í-dzi*
onion CTR1 today CTR1 nobody C_{1s}.SBJ-PROG.NEG-buy
'As for the onion, today nobody is buying (it).' (conv-street_100720_2)

In English and other Germanic languages, similar constructions without resumptive pronoun would be analyzed as cases of topicalization (see Section 4.1). However, I argue that it is not necessary to posit the existence of a construction like topicalization in Avatime. As I showed in Section 2.7.1, objects that have been previously mentioned can sometimes be dropped. An example of the same verb *dzi* 'buy' used without an overt object in a construction without left dislocation can be seen in line 2 of (10).

(10) 1 A: *ze-dzi kụ-kɔli-wá drugstore kɪ́=yɛ*
IT-buy C_{5s}-cough-medicine:LOC drugstore give=C_{1s}.OBJ
'Go and buy cough medicine in the drugstore for him.'

2 B: *mè-dzi*
1s-buy
'I bought (it).' (conv-street_100720_2)

This means that an example such as (9) can be analyzed as a case of left dislocation with an unexpressed resumptive object pronoun. This analysis has a number of advantages over postulating a separate topicalization construction. First, it is based on syntactic devices attested elsewhere in the language (left dislocation and zero anaphor) and does not introduce new entities into the description (topicalization). Second, it captures the fact that the constructions with and without a resumptive pronoun are functionally and structurally identical.

Resumptive elements can also be full noun phrases instead of pronouns. This is quite rare, but there are some cases in the corpus, one of which can be seen in (11).

(11) *lɛ̌* [*ò-gbe-nò* *gì* *bɛ-kpɛ* *ní* *atrodze* *ò-le-lò=e*],
and C_{2s}-rope-DEF REL C_{1p}.SBJ-put LOC Atrodze C_{2s}-neck-DEF=CM
ò-gbe-nò *è-dzè*
C_{2s}-rope-DEF C_{2s}.SBJ-long
'And the rope which they put around Atrodze's neck, the rope was long.'
(kadzidzia_110406_QM)

This subsection has shown that left dislocation is not necessarily accompanied by a prosodic break and a resumptive pronoun. The status of a prosodic break as an indicator for left dislocation is unclear, as it could be that prosodic breaks are also possible in other places of the clause. Resumptive pronouns, when present, do unambiguously indicate left dislocation. The other clear indicator of left dislocation is the position of the left dislocated element before the subject and the focus-marked element.

4.2.2 Types of left dislocated elements

Left dislocated elements are most frequently noun phrases, but can be prepositional phrases and adverbs too. They can be arguments, adjuncts, nominalized verbs, parts of complex phrases or noun phrases that do not have a grammatical relation with the remainder of the sentence. Left dislocation of the object was illustrated by example (4) above, repeated here as (12).

(12) [*ɔ́-dzɛ* *yɛ* *fóto-à*] *bɛ-zɛ̀* ***ba*** *pɔ́* *a*
C_{1s}-woman C_{1s} photo-DEF.C_{1p} C_{1p}.SBJ-receive C_{1p} COMPL Q
'The woman's photos, have they collected them all?'
(conv-funeral_100528_8-1)

Objects are easy to recognize as left dislocated. If an object occurs before the main verb and is not marked with the focus marker, it is left dislocated. Moreover, objects are usually crossreferenced with a resumptive pronoun in the remainder of the clause.

Subjects are more problematic to identify as being left dislocated. Their canonical position is already before the verb, so in the absence of other preverbal elements, position cannot be used as a clue. Obligatory subject marking on the verb means that resumptive pronouns are not necessary: independent subject pronouns are not required in a grammatical clause. As I explained in the previous section, a prosodic break is not obligatory with left dislocated elements and it is not clear whether it can be used as a defining property: this would require more research on the possibility of prosodic breaks in other places of the sentence (for instance, following the subject in

canonical position). In a simple sentence with the subject as the only preverbal element, there is thus no way to tell whether the subject is left dislocated or not.

This could make one think that subjects are always left dislocated. However, this is not the case: subjects canonically follow focus-marked elements whereas left-dislocated elements precede focus-marked elements (see the word order in (5) in the previous section). An example of the subject following a focus-marked element can be seen in (13), where the subject *ɔgblaga* 'snake' follows the focused element *ɔ̀klị̀lɔ̀ kó* 'only the leg'.

(13) *gba ɔ̀-klị̀-lɔ̀ kó ɔ-gblaga í-zɛ̌-gbɔnɔ̀*
first C_{2s}-leg-DEF only:FOC C_{1s}-snake C_{1s}.SBJ-HAB-touch
'First, the snake usually bites [the leg only]$_{FOC}$.' (illness_100616_SO-DS)

Such examples are rare though, as focus marking is not present in most sentences. Subjects are thus in many cases ambiguous with respect to left dislocation.

However, there are examples where a resumptive element clearly indicates that the subject is left dislocated. These resumptive elements often occur when the subject is contrasted or quantified. An example can be seen in (14), where there is a resumptive pronoun *lɛ* 'it', which is modified by the additive particle *tsyɛ* 'too'.

(14) *kɔ [li-bí lɛ́-lɔ̀ gì lị̀-kpasí wɔ li-po-le*
then C_{3s}-wound C_{3s}-DIST REL C_{3s}.SBJ-be.in:LOC 2s C_{3s}-stomach-DEF
*mè] kɔ **lɛ** tsyɛ li-tse*
inside then C_{3s} ADD C_{3s}.SBJ-die
'Then that wound in your stomach, then that too will heal (literally: die).'
(illness_100616_SO-DS)

There are also examples in which the subject is clearly displaced from its canonical position. This can be because it precedes a focus-marked element, another left dislocated element, a conjunction or a preposed adverbial clause. Some examples can be seen in (15), where the subject precedes a focused element (note the difference to (13)) and (16), where the subject of an embedded clause occurs outside of that clause.

(15) [*wɔ tsyɛ*] *á-dei-lá wɛ̀ɛ́-ta wìyàwìyà te*
2s ADD C_{3p}-corn-DEF:FOC 2s.SBJ.PROG-chew ID like.that
'You too, you are chewing [corn]$_{FOC}$ like that. (conv-street_100720_2)

(16) [*katá* *líyɛlu* *gì* *í-zě-vù* *bá-nɔ-à*] *xé*
cold this.type REL C_{1s}.SBJ-HAB-catch C_{1p}.SBJ-person-DEF when
a-ta=ɛ *wɔ́-tịsịà*
C_{1s}.SBJ-bite=CM 2s.SBJ-sneeze
'This type of cold that catches people, if it bites you, you will sneeze.'
(conv-street_100720_2)

In these cases the subject is clearly not in its canonical position, but there is no independent resumptive pronoun. Similar to the case of zero objects, there is no reason to assume a different kind of displacement (i.e. topicalization) for just these elements, so they will be analyzed as cases of left dislocation.

Example (17) shows an example of the left dislocation of a part of a constituent, in this case the possessor of a possessive construction. The possessive pronoun *yɛ* 'its' refers back to the left dislocated element *òdzògbòlo mè vovo* 'desert vovo' (a type of plant). Objects of prepositional phrases can also be left dislocated, as was shown in (8) above.

(17) [*ò-dzògbò-lo* *mè* *vovo=e*] *bíà-tu* ***yɛ*** *ò-gù-no*
C_{2s}-desert-DEF inside t.o.plant=CM C_{1p}.SBJ.POT-uproot C_{1s} C_{2s}-root-DEF
'The desert vovo, they will dig up its root.' (illness_100616_SO-DS)

Verbs or verb phrases can also be left dislocated. In that case the regular inflected verb (phrase) occurs in its regular position in the sentence and a nominalized verb (phrase) occurs in the left detached position. An example can be seen in (18).

(18) 1 *lósò* [*kị-fụ* *kpɛ-kpɛ*] *àbla* *xé* *bíà-do* *sị̀* ***wɔ̀-kpɛ***
so C_{4s}-fire RED-put now when C_{1p}.SBJ-say COMP 2s.SBJ-put
kị-fụ, *wɛ̀ɛ́-kpɛ* *ɔ́-ntɔ* *kokó* *kị-fụ*
C_{4s}-fire 2s.SBJ.PROG-put C_{1s}-person:INDF cocoa:LOC C_{4s}-fire
'So setting fire, now if they say that you set fire, that you are setting somebody's cocoa farm on fire,

2 *xé* *be-vù=wo* *kɔ* *bíà-kpɛ=wɔ*
when C_{1p}.SBJ-hold=2s.OBJ then C_{1p}.SBJ.POT-put=2s.OBJ
lị-gba
C_{3s}-room
'if they catch you, then they will put you in prison.'
(conv-greenhouse_110408_SO-ViA)

Most previous research on left dislocation does not mention left dislocation of adjuncts. This is because left dislocation has usually been defined

based on the presence of a resumptive pronoun and initial adjuncts are usually not crossreferenced in the remainder of the sentence. As I argue that resumptive pronouns are not necessary in Avatime left dislocation, there seems to be no principled reason to exclude adjuncts. Adverbials indicating time and place frequently occur in sentence-initial position, but can also occur clause-finally. When they occur in sentence-initial position, they are often, but not necessarily followed by a prosodic break, just like other left dislocated elements. If there is a focused element in the sentence, it follows the initial adverbial, as can be seen in (19). This is another indication that these adjuncts occur in the same sentence position as other left dislocated elements.

(19) [*àblɔ kɔ*] *kù-da kó e-kpese kú-ŋwɛ*
now CTR1 C_{5s}-drink only:FOC C_{1s}.SBJ-start C_{5s}-drink
'Now he has started drinking.' (conv-rice_110411_3-3)

Left-dislocated adjuncts are usually not crossreferenced by a resumptive element in the remainder of the sentence, as they are optional constituents. There are, however, a few cases of left dislocated adjuncts with a resumptive element. An example can be seen in (20).

(20) [*níklɔ̀ gì bi-dɔ̀mɛ bi-gbɔnì=wɔ=ɛ*] *bɛ-fá*
there REL C_{4p}-thing C_{4p}.SBJ-touch=2s.OBJ=CM C_{1p}.SBJ-cut:LOC
lɔ̀*=*ɛ
there=CM
'There where the thing touched (bit) you, they cut there.'
(illness_100616_SO-DS)

Another type of sentence initial element is what Chafe (1976) calls a Chinese-style topic: a noun phrase that does not have any grammatical relation with the remainder of the sentence, but is clearly connected with it. There are 26 of these in my corpus. An example can be seen in (21). Here the left-dislocated 'honey' specifies what is in the bottle that is talked about in the remainder of the clause.

(21) [*ki-bu-yè gì bɛ-zɛ̌-kpɛ da ní òholò kè-dzi-a*
C_{4s}-honey-DEF REL C_{1p}.SBJ-REC-put sell LOC Ho C_{6s}-market-DEF
mɛ̀ kivòe] *xé me-vì tùkpɛ tiasɛ tɔ sì eighty*
inside yesterday when 1s.SBJ-ask bottle how.much PURP say eighty
hii
about
'The honey that they were selling in the Ho market yesterday, when I asked how much is a bottle, they said about eighty.' (conv-street_100720_2)

Table 4.1: Types of left dislocation.

Left dislocated element	Occurrences
adjunct	138
object / oblique	67
subject	56
Chinese style	26
part of constituent	17
verb phrase	1
total	*305*

As these Chinese-style topics do not bear a grammatical relation with the remainder of the sentence, they look a bit like adjuncts. The difference is that adjuncts also function as modifiers in non-initial positions, whereas Chinese-style topics only occur in left-dislocated position.

Table 4.1 shows how frequently the types of left dislocated elements mentioned in this section occur in my corpus of left dislocation. An interesting difference with English left dislocation is the proportion of subjects. Gregory & Michaelis (2001) show that almost all left dislocated elements in their corpus of English conversation are subjects (167 out of 187, 89%). In the Avatime data, even if the adjuncts are left out (Gregory and Michaelis do not include adjuncts), subjects are far from that frequent (34% of all non-adjunct left dislocations). This difference could be related to the fact that, in Avatime, subjects in-situ cannot be distinguished from left dislocated subjects when there are no other preverbal elements. In English, on the other hand, left dislocated subjects are always crossreferenced by a resumptive pronoun in the remainder of the sentence. In English, simply starting with a lexical subject and then using an additional subject pronoun counts as left dislocation. In Avatime, reference to the lexical subject is always repeated by the subject marking on the verb (see Section 2.7.1). A number of the cases of left dislocated subjects in English may thus be equivalent to Avatime in-situ subjects.

4.2.3 Particles

Left dislocated elements are frequently marked with phrase-final particles (see also Section 2.3.2). These are often additive and contrastive particles, indicating some relation between the left dislocated element and a contextually salient alternative. An example of a left dislocated element marked with the contrastive particle *kɔ* (underlined) can be seen in line 2 of (22). An

example of a left dislocated element marked with the additive particle *tsyɛ* (underlined) can be seen in (23). Chapters 5 and 6 provide more information about the contrastive and additive particles respectively.

(22) Speaker B is interviewing speaker A about traditional medicine.

1 A: *kɔ* *kị-dzya* *kị-ŋwàfùmɛ̀-dzya* *kɛ́* *bíà-zɛ-kɔ̀*
then C_{4s}-meat C_{4s}-bush-meat C_{4s}:FOC C_{1p}.SBJ.POT-REC-take
tɔ *ò-ni-nò* *kí* *ɔ-pɔ̀pɔ̀-ɛ* *àló*
cook C_{2s}-soup-DEF give C_{1s}-new.mother-DEF or
ɔ-mɛ́dzɛ
C_{1s}-pregnant.woman
'Then it is meat, bush meat, that they use to prepare soup for the new mother or pregnant woman.'

2 B: [*blɔ* *ke-pe-à* *ba-gá* *yà* *kɔ=ɛ*] *bá-tá-kɔ̀*
1p C_{6s}-house-DEF C_{1p}-animal PROX CTR1=CM C_{1p}-INT-take
tɔ *bì-dɛ́* *yà*
cook C_{4p}-thing PROX
'As for our domestic animals, they don't use them to cook this thing.' (illness_100616_SO-DS)

(23) [*bɛ* *tsyɛ*] *kị-ta-kpaị=**bɛ*** *petee* *bu*
C_{4p} ADD 1p.SBJ-INT-uproot=C_{4p}.OBJ all remove
'Those ones (weeds), too, we will remove them all.'
(rice_100613_EN-MM)

Another particle that commonly occurs at the end of left-dislocated elements is the clitic *=E* which I gloss as clause marker (CM). This particle assimilates in both ATR value and vowel height to the previous vowel. An example can be seen in (24).

(24) [*lá-wlɔ̀=ɛ*] *bɛ-tá-ŋà* *ésmàs-yɛ* *nì* ***na***
C_{3s}-DIST=CM C_{1p}.SBJ-INT-eat Christmas-DEF COM C_{3s}
'That one (type of rice), they will celebrate Christmas with it (they will eat it for Christmas).' (rice_100613_EN-MM)

The particle *=E* can co-occur with the other (additive or contrastive) particles, in which case it follows them. This can be seen in example (22) above, where it attaches to the contrastive particle *kɔ*.

As I mentioned in Section 2.8.1, this particle also occurs at the end of relative clauses, some preposed adverbial clauses and conditional clauses, and some types of matrix clauses that start with clause linkage markers. An

example of this can be seen in (25). Here, both the conditional clause in line 1 and the matrix clause starting with *kɔ* in line 2 end in *=E*.

(25) 1 *gì wo-nye a-trá-gbanị=wɔ=ɛ*
REL 2S.POSS:C_{1S}-husband C_{1S}.SBJ-INT-marry=2S.OBJ=**CM**
'When your husband was going to marry you,'

2 *kɔ bɛ-pa bì-dɛ́wlɔ́ wɔ sụ=i̱*
then C_{1P}.SBJ-remove C_{4P}-thing:DIST:LOC 2S side=**CM**
'then those things (beads) would be taken off you.'

(ablabe_AD-YD)

Because of assimilation, when the particle follows a front vowel with a high tone, it is only audible as lengthening of that vowel. This means that, in many corpus cases, it is difficult for me to determine with certainty whether the particle occurs or not. Perhaps going over these cases with an Avatime consultant could solve this problem in the future. For the present work, to get an idea of how frequently left dislocated elements are marked with the particle, I looked at all left-dislocated elements that do not end in a front vowel. In these cases I can clearly hear whether the particle is used or not. I also discounted left dislocations including relative clauses, because these often end in the particle independent of left dislocation. I did not consider the cases of left-dislocated adjuncts, as these might functionally be different from other kinds of left dislocated elements (see Section 4.4) and therefore behave differently with respect to the use of the particle. A total of 86 left dislocated elements remained, 39 of which are marked with the particle .

The particle *=E* also follows subjects that appear to be in their canonical position, as in (26).

(26) *nílɔ̀ kɔ mɔ=ɛ mɔ́-sɪ̀mị*
there CTR1 1S.CTR=**CM** 1S.SBJ.NEG-get.involved
'As for that side, me, I will not get involved.' (conv-funeral_100528_8-1)

As I explained in the previous section, subjects in their regular position cannot be distinguished from left dislocated subjects unless they are preceded by a focus-marked element (in example (26) above the subject is not preceded by a focus-marked element). Because of this, one may think that using the particle is a way to mark the subject as left dislocated. However, some elicited examples show that subjects that follow a focus-marked element, and are thus in canonical position, can also be marked with the particle. Objects, on the other hand, cannot be marked with the particle *=E* in canonical position. Examples can be seen in (27). These examples are constructed by

me and checked for acceptability by two speakers. Both speakers were very confident in accepting (27a) and rejecting (27b).

(27) a. *a-wlakpa-lá* *ò-besì-lo=**e*** *èɛ́-ta*
C_{3p}-leaf-DEF:FOC C_{2s}-sheep-DEF=**CM** C_{2s}.SBJ.PROG-chew
'It is [leaves]$_{FOC}$ the sheep is eating' / 'As for the sheep, it is eating [leaves]$_{FOC}$' (elic-CM_110423_AB)

b. **Kòfi* *(yɛ́)* *e-ye* *ò-besì-lo=**e*** *kivòe*
Kofi (C_{1s}:FOC) C_{1s}.SBJ-kill C_{2s}-sheep-DEF=**CM** yesterday
Inteded meaning: 'As for the sheep, [Kofi]$_{(FOC)}$ killed it yesterday' / '(It was) Kofi (who) killed the sheep yesterday.' (elic-CM2_110424_AB)

Left dislocated elements marked with the particle $=E$ are very often followed by an intonation break: out of the 39 cases of the particle, 36 are followed by a break. This amounts to 92%, which is more than the 68% of prosodic breaks in the entire (narrow) corpus (see Section 4.2.1).

There are several different ways in which the particle $=E$ can be analyzed. Skopeteas (2010) analyzes similar clitics in Mayan languages as marking the right edge of (non-final) intonation phrases. This means that they do not contribute to the propositional content, but only serve to demarcate intonational boundaries. If such an analysis were to be adopted for Avatime, this would explain why left-dislocated elements are more frequently followed by a prosodic break when they are marked with $=E$. It also explains the occurrence of the particle in clause-final position, such as line 1 of (25) above, as clauses are normally followed by a prosodic break. If an analysis in terms of marking intonation phrases were to be adopted, it would have to include intonation phrases in all positions, also clause-final ones, in order to incorporate examples such as line 2 of (25) above.

However, a difference between the Avatime and the Mayan particles is that the clause-final use of the Avatime particles in part seems to depend on the clause linkage marker (see Section 2.8). The particle can thus not simply be marking a prosodic boundary, there has to be some syntactic or semantic/pragmatic content to it.

If the particle is not a marker of prosodic boundaries, perhaps it is better analyzed as marking boundaries on the syntactic level, i.e. marking the end of certain types of clauses. The particle then marks left dislocated elements as if they formed a clause by themselves, i.e. as extra-clausal. The problem with this analysis is the acceptability of (27a) above. In this case, the particle marks a subject that follows a focus-marked element and is thus clearly not extra-clausal.

A third possible direction for a unified analysis of all occurrences of the

particle is that it has the pragmatic function of marking background information or presupposed information. This is in line with Ameka's (1991) analysis of the analogous Ewe (Kwa) particle *lá*. Ameka describes *lá* in the broadest sense as marking background information, or more precisely, information that "a speaker wants an addressee to assume in order for him/her to process the rest of the discourse more easily" (p. 152). This account unites the uses of the particle with left dislocated elements, relative clauses and preposed temporal and conditional clauses, all of which can be argued to convey background information. It explains why the particle often occurs at syntactic boundaries. It can also account for the use of the particle following subjects in canonical position, as subjects also tend to encode background information. It is still not clear, however, how explanatory this account really is, as one could argue that left dislocation or preposing of subordinate clauses itself functions to indicate the status of the initial element as presupposed. What then, does the particle add to this? As I showed above, in Avatime, only about half of the cases of left dislocation are marked with the particle $=E$. So what is the difference between the cases that are and the cases that are not marked with the particle? Based on the corpus examples, I cannot detect any difference in meaning or use. The intuition of native speakers is also that there is no meaning difference between left dislocated elements with and without particle. They sometimes even add or leave out the particle when repeating a sentence, without being aware of it. It could thus be that the particle is simply used as an extra indicator of the presupposed status of some information, even though this is already apparent in other ways. However, there is still another problem with this analysis: it does not capture the use of $=E$ at the end of main clauses that start with the clause linkage markers *kɔ* and *lɛ̌* (see for instance line 2 of (25) above), which are definitely not presupposed. It is interesting to note that the Ewe particle *lá* does not mark main clauses (of any type). Perhaps the Avatime particle was originally like its Ewe counterpart and at a later stage acquired the additional uses of marking certain types of main clauses. In any case, a unified meaning or function of the Avatime particle $=E$ does not seem possible and at least two senses must be proposed: marking presupposed or background information and marking clause boundaries.

4.2.4 Summary

In this Section, I have described the properties of left dislocation in Avatime. Left dislocation in Avatime can be identified as follows. A left dislocated constituent is:

1. Any object, oblique argument or temporal/spatial adjunct that occurs before the verb.

2. Any sentence-initial element that is crossreferenced in the remainder of the sentence.

3. Any noun phrase, adverb or prepositional phrase that precedes a focused element, another left dislocated element or a conjunction.

In addition, left dislocated elements are often set off from the remainder of the sentence with a prosodic break and may be marked by additive or contrastive particles and/or the clause marker *=E*.

It is clear that the criteria listed above are language-specific and do not necessarily match definitions of left dislocation in other sources. Resumptive pronouns, which are often mentioned as the main defining property of left dislocation (e.g. Ross, 1967; Geluykens, 1992; Gregory & Michaelis, 2001), are not very important for left dislocation in Avatime. On the other hand, because of the rigid word order and absence of a construction like topicalization, position is a better indicator of left dislocation than it is in, for instance, English. Focusing more on position and less on resumptive pronouns means that Chinese-style topics and sentence-initial adjuncts are also considered to be left dislocated.

In the next section, I will discuss in more detail one unusual property of left dislocation in Avatime: its occurrence in subordinate clauses.

4.3 Left dislocation and subordination

As I mentioned in Section 4.1, there is some controversy in the literature over whether or not left dislocated elements can occur within subordinate clauses. Syntactically, left dislocated elements are usually analyzed as extra-clausal and therefore should not be able to occur within a subordinate clause. Some authors indeed state, based on elicited data, that left dislocation is not allowed within subordinate clauses (Emonds, 1970; Ogle, 1981). Others have found left dislocation to be possible within subordinate clauses. Hooper & Thompson (1973), Gundel (1975) and Hirschbühler (1997) found evidence of this via grammaticality judgments. Shaer (2009) found some naturally occurring examples using an internet search. Gregory & Michaelis (2001, p. 1678) mention that the corpus they studied contains one case of left dislocation within a subordinate clause.

There do seem to be pragmatic constraints on the types of subordinate clauses in which left dislocation can occur. Hooper & Thompson (1973)

claim that left dislocation and other fronting constructions can occur in subordinate clauses, but only in those that are asserted. Gundel (1975) suggests that whether or not left dislocation is allowed within a subordinate clause might be related to whether or not the sentence can be said to be 'about' a noun phrase within the subordinate clause. Ogle (1981) claims that left dislocation cannot occur within subordinate clauses at all, but proposes a constraint for other fronting constructions: these can only occur in subordinate clauses that are not pragmatically presupposed. These three suggestions point towards the idea that left dislocation is incompatible with clauses that are inherently presupposed. This pragmatic account explains why left dislocation seems to be completely ungrammatical within some types of subordinate clauses, such as relative clauses, but not so bad within other types, such as complement clauses.

In the remainder of this Section I will discuss cases of left dislocation within subordinate clauses in Avatime and suggest how these can be accounted for.

4.3.1 Types of subordinate left dislocation

In the subsection of the Avatime corpus used for the present chapter, I found 13 subordinate clauses that include left dislocation. As two of these clauses contain two left dislocated elements, there are altogether 15 left dislocated elements in the corpus. This seems quite a high number compared to the one case which Gregory & Michaelis (2001) found in their English corpus, which contained about the same total number of left dislocations. In addition to the cases that were found in the narrow corpus, two more cases of subordinate clauses containing left dislocation were encountered in the wider Avatime corpus. In order to make the procedure and results in this section maximally compatible with previous research, left dislocated adjuncts are not taken into account.

Out of the 15 subordinate clauses with left dislocation, 13 are complement clauses. These clauses are complements of different types of verb, but most frequently verbs of saying (8 cases) (28). Three are complements of *nu* 'hear' (29), one is a complement of *te* 'know' (30), and one case is a construction using the verb *bìtɛ* 'do' and the particle *ŋwi* 'like/as if' (31).

(28) *sị́=ba* *sì* [*ì-tsré* *lɔ̀* *gì* *elɔ̀m* *á-kɔ* *maní*
tell=C$_{1p}$.OBJ COMP C$_{2p}$-okra DIST REL elɔm C$_{1s}$.SBJ-take bring:LOC
ke-pe-a *mɛ̀*] *ba-da=**lɛ*** *kɪ́=wɔ*
C$_{6s}$-house-DEF inside C$_{1p}$.SBJ.SBJV-sell=C$_{2p}$.OBJ give=2s.OBJ
'Tell them that the okra that Elorm brought to the house, they should sell it to you.'[2] (conv-street_100720_2)

(29) *wáà-nu tɔ blɔ petee kíà-nu sị̀ [ka-klí*
2s.SBJ.POT-hear PURP 1p all 1p.SBJ.POT-hear COMP C_{6s}-foot
*ká-lɔ̀ xunyɔ=ɛ] mè-bu=**ka** kóko*
C_{6s}-DIST CTR3=CM 1s.SBJ-remove=C_{6s}.OBJ already
'Listen so we will all hear that as for that step, I've taken it already.'
(chiefs-meeting_100619_03)

(30) *lɛsì bɛ-kị=blɔ kui-tè sị̀ [bá-nàátɔ] xé*
so C_{1p}.SBJ-give=1p.OBJ 1p.SBJ-know COMP C_{1p}-person:INDF if
*wáà-kpe=**ba** ní wɔ li-wè-le mè lị-lɛ*
2s.SBJ.POT-invite=C_{1p}.OBJ LOC 2s C_{3s}-day-DEF inside C_{3s}.SBJ-stand
sị̀ kè-kpe-kpe-plekpe-à ka-trɛ ba-dzịdzị tie-glò
COMP C_{6p}-RED-invite-letter-DEF C_{6p}.SBJ.SBJV-go C_{1p}-month C_1-six
'We were made to understand that some people, if you want to invite them, the invitation letter should go there six months in advance.'
(chiefs-meeting_100619_03)

(31) The speaker just explained that at funerals, money will be given to the relatives of the deceased.

pɔ̀ bị-bìtɛ ŋwi sị̀ le nyàfɛ [ɔ́-niyɛ́lɔ̀ gì
but C_{4p}.SBJ-do like COMP ? maybe C_{1s}-person:DIST REL
*e-tsé=e] **yɛ́** bɛ-kɔ*
C_{1s}.SBJ-die=CM C_{1s}:FOC C_{1p}.SBJ-give
'But it should be as if the person who is dead, they are giving it to [him]$_{FOC}$.' (funeral_100531_MM-EM)

The two other cases of left dislocation within subordinate clauses occur in a purpose clause (32) and a reason clause (33).

(32) *blɔ petee kíà-tsa tɔ [kị-bɔ̀-ɛ] bíà-lɛ=**kɛ***
1p all 1p.SBJ.POT-meet PURP C_{4s}-money-DEF C_{1p}.SBJ.POT-share=C_{4s}
kí ɔ̀-mà kákaa
give C_{2s}-town every
'We will all meet so that we share the money to every town.'
(chiefs-meeting_100619_03)

[2]Interestingly, the literal English translations of most examples of left dislocation in complement clauses do not sound so bad. This could be an indication that given the right context, embedded left dislocation is also allowed in English. Corpus examples from English would be needed to shed more light on this and to complement the previous research, which has mostly been based on grammaticality judgments of constructed sentences.

(33) 1 A: *pɔ̀ mɔ́-tsa kị̀-bɔ̀-ɛ lese sị̀ [e-bo-á*
but 1s.SBJ.NEG-pay C_{4s}-money-DEF because C_{3p}-thing-DEF
lélu=i] xé gì wó-vù à-ŋwu-nà kɔ
this.type=CM when REL 2s.SBJ.NEG-catch C_{3p}-eye-DEF then
li–
C_{3s}–
'I did not pay because these things, if you are not careful, then it–'

2 B: *kɔ li-dzi mɛ à-gba=ɛ*
then C_{3s}.SBJ-become 1s C_{3p}-burden=CM
'Then it will become my problem.' (conv-funeral_100528_8)

Left dislocation within other types of adverbial clauses or within relative clauses is not attested in my corpus. There is one example of a clause introduced with the clause linkage marker *gì* (see Section 2.8) that contains a left-dislocated element. This is shown in line 2 of example (34). Here *ba kị̀bɔ̀ɛ* 'their money', the object of the verb *zɛ* 'collect', is left dislocated. As the clause starts with *gì*, which is usually a subordinator, we might analyze this as an appositive relative clause. However, as I also mentioned in Section 2.8.2, there are some cases in which *gì* seems to be best analyzed as a coordinating conjunction. Example (34) could be one such case, which would mean the left dislocation is not surprising.

(34) 1 [*bá-nɔ̀ liɔfɔ̀ nì ɔ̀gɔtiabà*] ***bá*** *ba-lí́ present*
C_{1p}-person ten and eight C_{1p}:FOC C_{1p}.SBJ-be.at:LOC present
àló ke-zè-ze mè àblá te
or C_{6s}-RED-sit inside now like.that
'18 people, they are present, or at the gathering right now.'

2 *gì* [*ba kị̀-bɔ̀-ɛ*] *ki-zɛ=**kɛ***
REL C_{1p} C_{4s}-money-DEF 1p.SBJ-collect=C_{4s}.OBJ
'And their money, we've collected it.' / 'whose money we've collected (it).'

3 *gì ki-nu cedi àkpe alafa tiata nì àvìteglò*
REL C_{4s}.SBJ-be cedi thousand hundred three and sixty
'And it is 360,000 cedis.' / 'which is 360,000 cedis.'
(tribunal_100513_4)

Eliciation yields another type of subordinate left dislocation: left dislocation within conditional clauses. The grammaticality of these constructions has been confirmed by three consultants. An example can be seen in (35). In this case, an interpretation as coordinated rather than subordinated does not seem possible.

(35) *xé* [*à-xwɛ̀-na* *kɔ=ɛ*] *wɔ́-wa=**la**=ɛ* *wáà-mɔ̀*
if C_{3p}-work-DEF CTR1=CM 2S.SBJ-do=C_{3p}.OBJ=CM 2S.SBJ.POT-see
kị-bɔ̀-ɛ
C_{4s}-money-DEF
'If you work, you will get money.' (more literally: 'If as for work, you do it, you will get money.') (elic-emb-IS_110413_SO)

Within relative clauses left dislocation is judged ungrammatical.

All in all, based on corpus data only, left dislocation occurs within complement clauses (28-31), purpose clauses (32) and reason clauses (33). There is also a possible example of left dislocation in a non-restrictive relative clause (34), although this seems better analyzed as a case of coordination. If elicited data is taken into account, left dislocation might occur in conditional clauses (35) too.

In the next section I will look for an account for these findings from both a functional and a syntactic perspective.

4.3.2 Analysis

As I mentioned above, left dislocation has been claimed not to be possible within presupposed clauses. This makes sense from a functional perspective: by highlighting a referent, left dislocation modifies the common ground shared between speaker and hearer (see Section 4.4 for more information about the function of left dislocation). Presupposed propositions, on the other hand, refer to the situations which uncontroversially belong to the common ground.

It has been claimed that some types of subordinate clauses are inherently presupposed. Restrictive relative clauses are among the clearest examples of presupposed clauses, and indeed these do not allow left dislocation in Avatime. The complements of certain types of predicates, called factive predicates, have also been claimed to be inherently presupposed (Kiparsky & Kiparsky, 1970). Examples in English are *doubt*, *deny*, *regret* and *be surprised*. I do not have evidence of the (un)grammaticality of left dislocation within this type of complement in Avatime. None of the complement clauses with left dislocation in the corpus are complements of factive predicates. Some types of English temporal adverbial clauses have also been claimed to be presupposed, such as those that begin with *when*, *before* and *after* (Hooper & Thompson, 1973). In Avatime, left dislocation has not been found within similar adverbial clauses. Haiman (1978) claims that conditionals, cross-linguistically, are presupposed. This is interesting in the light of the elicited data presented in the previous section that shows left dislocation within

conditionals. The possibility of left dislocation within conditionals could be an indication that conditional clauses are not necessarily presupposed in Avatime. Additional evidence for this hypothesis comes from focus constructions, which should also be incompatible with presupposition, but readily occur within conditional clauses, as in example (36).

(36) *xé gì ku-ká wáà-kpɛ=ɛ kɔsị̀ wɔ̀-kpɛ ku-kà*
if REL C_{5s}-fence:FOC 2s.SBJ.POT-put=CM hurry 2s.SBJ-put C_{5s}-fence
'If you'll put down a [fence]$_{FOC}$, hurry and put down the fence.'
(rice_100613_EN-MM)

Another way in which the compatibility of conditional clauses and information structure marking can be explained is by assuming that presuppositions do not necessarily contain non-controversial information only and can still include highlighting of certain elements (see Lambrecht & Michaelis (1998) for an argument along these lines with respect to English content questions).

From a functional point of view, the cases of left dislocation within subordinate clauses in the Avatime corpus are thus unproblematic: complements of non-factive verbs, purpose clauses and reason clauses are not inherently presupposed. The elicited case of left dislocation inside a conditional clause is problematic if Haiman (1978) is right that conditional clauses are presupposed. We either have to assume that Haiman is wrong, or that presupposed clauses can contain some highlighting. To resolve this issue, more research on presupposed clauses and information structure in Avatime is necessary.

With regard to syntax, the question to be answered is how to reconcile the extra-clausal nature of left-dislocated elements with their occurrence in subordinate clauses. There are two steps in answering this question. The first is to see whether the attested cases of subordinate clauses containing left dislocation are truly subordinate or not. If it can be shown that at least some of them are truly subordinate, a syntactic account is needed that allows extra-clausal elements within subordinate structures. I start with the first step before proceeding to the second.

Dependent clauses are not necessarily syntactically subordinate (see e.g. Matić et al., 2014). Clauses are semantically dependent on other clauses if they function as arguments or modifiers of a main clause. To claim syntactic subordination, more evidence is needed. In particular, adverbial subordinate clauses cannot always easily be distinguished from coordinated clauses. Several syntactic tests can be applied, such as whether constituents of one clause can be questioned separately and whether backward anaphora are possible (see e.g. Haspelmath, 2004). However, there seems to be no well-established procedure that can always tell the difference. The Avatime cases

of adverbial clauses containing left dislocation are a purpose clause and a reason clause. I do not have evidence for the status of these clause types as syntactically subordinate.

In elicitation, I also found cases of left dislocation within conditional clauses. Avatime conditional clauses seem to be able to occur both before and after the main clause (see Section 2.8.1), which Matić et al. (2014) take to indicate the subordinate status of a dependent clause. It thus seems to be likely that conditional clauses are syntactically subordinate, but a more detailed investigation including other syntactic properties is needed.

The clearest cases of subordination seem to be the complement clauses. As these are finite clauses which function as arguments, they cannot be analyzed as cases of coordination or cosubordination (see Van Valin, 2005, Chapter 6). However, there is evidence (from English) in the literature that even finite complement clauses with a complementizer may not be truly subordinate. Complement taking predicates may function as discourse markers or adjuncts rather than matrix clauses. English phrases such as *I think* and *I believe* are frequently used as epistemic markers. When these phrases are used as such they have been shown to have a different intonation pattern compared to when they are true matrix clauses (Dehé & Wichmann, 2010). Thompson (2002) even finds that in a corpus of English conversation, most complement clauses are not subordinate. The main action carried out by the utterance is in almost all cases carried out by the complement clause whereas the matrix clause is a formulaic fragment that provides epistemic, evidential or evaluative information.

Going back to Avatime, the question is now whether the complement clauses that contain left dislocations can be analyzed as non-subordinate in a similar way. This does indeed seem possible for some cases. In (29), repeated here as (37), the complement is introduced by a fixed formula *wáànu tɔ X -nu sị̀* 'listen so X will hear that' which is frequently used in official meetings to start a turn.[3] This is a clear case of a formulaic fragment, the complement of which contains the information that the speaker wants to convey. This formula accounts for two of my cases of subordinate left dislocation.

(37) *wáà-nu* *tɔ* *blɔ* *petee* *kíà-nu* *sị̀* [*ka-klį́*
2s.SBJ.POT-hear PURP 1p all 1p.SBJ.POT-hear COMP C_{6s}-foot
ká-lɔ̀ *xunyɔ=ɛ*] *mè-bu=**ka*** *kóko*
C_{6s}-DIST CTR3=CM 1s.SBJ-remove=C_{6s}.OBJ already
'Listen so we will all hear that as for that step, I've taken it already.'
(chiefs-meeting_100619_03)

[3] In official meetings people never directly address each other, but talk to a spokesperson instead, who at the beginning of their turn is told to 'listen so that the addressee will hear' (see Ameka, 2004).

In many other cases the matrix clauses are not formulaic, but do function as epistemic/evidential/evaluative markers. This is for instance the case in (30), repeated here as (38). Here the phrase *bɛkị̀ blɔ kuite sị̀* 'they let us know that' is used to give the statement some authority, while the main goal of the utterance is to convey the information in the subordinate clause. Thompson (2002) analyzes similar cases in English as less formulaic fragments, but non-subordinating nevertheless.

(38) *lɛsị̀ bɛ-kị̀=blɔ kui-te sị̀ [bá-nàátɔ] xé*
so C_{1p}.SBJ-give=1p.OBJ 1p.SBJ-know COMP C_{1p}-person:INDF if
*wáà-kpe=**ba** ní wɔ li-wè-le mè lị-lɛ*
2s.SBJ.POT-invite=C_{1p}.OBJ LOC 2s C_{3s}-day-DEF inside C_{3s}.SBJ-stand
sị̀ kè-kpe-kpe-plekpe-à ka-trɛ ba-dzịdzị tie-glɔ̀
COMP C_{6p}-RED-invite-letter-DEF C_{6p}.SBJ.SBJV-go C_{1p}-month C_1-six
'We were made to understand that some people, if you want to invite them, the invitation letter should go there six months in advance.'
(chiefs-meeting_100619_03)

In any case, there are also several examples in which the matrix clause is clearly 'doing the action' and cannot be analyzed as an epistemic, evidential or evaluative marker. An example of this is (28), repeated here as (39). The goal of this utterance is to make the addressee do something, which is conveyed by the imperative in the matrix clause.

(39) *sị=ba sị̀ [ì-tsré lɔ̀ gì elɔ̀m á-kɔ maní*
tell=C_{1p}.OBJ COMP C_{2p}-okra DIST REL elɔm C_{1s}.SBJ-take bring:LOC
*ke-pe-a mɛ̀] ba-da=**lɛ** kị́=wɔ*
C_{6s}-house-DEF inside C_{1p}.SBJ.SBJV-sell=C_{2p}.OBJ give=2s.OBJ
'Tell them that the okra that Elorm brought to the house, they should sell it to you.' (conv-street_100720_2)

Thus, even though some cases of left dislocation within complement clauses might be discarded as not being subordinate, there are still other cases of left dislocation within truly subordinate clauses. This means that the problem of extra-clausal elements within subordinate clauses remains and an account is needed for these cases.

Van Valin (2005) argues that there is one type of complement that is more than just a clause: direct discourse complements (literal quotations). These complements can obviously contain left dislocated elements, as they repeat a whole utterance. Van Valin analyzes them as sentential complements. In Avatime, direct discourse complements, like other types of complements, are linked with the complementizer *sị̀*. Because of this, it is not always possible

to distinguish direct and indirect discourse. Of the cases of left dislocation inside complement clauses, seven can be analyzed as direct discourse, although never unambiguously. These complements need no further explanation, as they need to be sentential complements on independent grounds. An example can be seen in (40). However, this still leaves several complements that are not direct discourse, several of which are definitely subordinate (such as (39) above).

(40) *kɔ* *mɛ-sị́=yɛ* *sì* *blɔ* *gì* *kú-nu* *viktor* *kà*
then 1s.SBJ-say=C_{1s}.OBJ COMP 1p REL 1p.SBJ.NEG-be Victor father
ye-bi-à *tsyɛ* *blɔ* *tsyɛ* *blɔ* *kị́-gà*
C_{1s}.POSS:C_{1p}-child-DEF ADD 1p ADD 1p 1p.SBJ-move
'Then I told her that we, who are not the children of Victor's father, too, we, too are welcome (literally: we moved).' (conv-funeral_100528_7)

Direct discourse complements could form a historical link to the acceptability of left dislocation in complement clauses. As I mentioned in Section 2.8.1, the complementizer *sì* is likely to have been grammaticalized from the verb *sị́* 'say/tell'. While it has been grammaticalized as a complementizer, it may have kept its property of allowing subordinate left dislocation, extending this to complements of different kinds of verbs.[4]

Nevertheless, a synchronic analysis also needs to be provided. If left-dislocated elements are analyzed as 'orphans', i.e. elements not integrated into the syntactic tree (Shaer, 2009), their occurrence within subordinate clauses is highly problematic. The in-between solution provided by Role and Reference grammar (Van Valin, 2005) that there is a left-detached position on a level above the clause but below discourse linking looks more promising in this regard: the left dislocated element occurs outside of the clause, but still forms a constituent with it. There is then no principled reason why this larger constituent, the sentence could not be subject to embedding. It does not seem a large step to propose that in Avatime, verbs can take complete sentences as complements, especially as it is already necessary, for independent reasons, to allow this in the case of direct discourse complements. Avatime complements can thus be subordinate sentences rather than clauses.

4.4 The functions of left dislocation

In the previous two sections, I discussed grammatical properties of left dislocation. I have shown how left dislocation can be identified and what kind

[4]Thanks to Rik van Gijn for this suggestion.

of elements can be left dislocated. I have also shown that left dislocated elements can occur in subordinate clauses. This indicates that they are not 'orphans', but should be analyzed as forming a constituent together with the following clause. With this background in mind, the next question to explore is what the function of left dislocation is. I will first discuss different analyses of the function of left dislocation in English before discussing the Avatime data.

4.4.1 Left dislocation in English

Left dislocation in English has mostly been analyzed as having one or both of two functions: introducing referents and indicating set membership. I will discuss each function in turn.

Referent introduction is the function most commonly assigned to left dislocation. However, it seems that the function of left dislocation cannot be referent introduction only, as referents can also be introduced in other ways, for instance in the focused part of the utterance. Lambrecht (1994) argues that the reason to introduce referents in left dislocated position is so that they can be the sentence topic ('what the sentence is about') in the following clause. Left dislocation is a way to get around restrictions imposed by the topic-accessibility hierarchy. This hierarchy states that active referents are preferred as topics, accessible (inferable) and unused (known but not yet mentioned) referents are dispreferred as topics and brand-new referents cannot be topics. In order to use accessible, unused and brand-new referents as topics, they can be promoted to active status by way of left dislocation. This process is captured by the principle of separation of reference and role: "do not introduce a referent and talk about it in the same clause" (Lambrecht, 1994, 185).

Prince (1998) argues against the use of the notion of sentence topic in the description of left dislocation. She observes that this notion is difficult to apply to corpus data, because it is not clear how to establish what a sentence is about. Moreover, she finds a number of cases in her corpus data in which the sentence was intuitively not 'about' the left dislocated elements and where tests for 'aboutness' (of e.g. Reinhart, 1981) fail. The function of left dislocation can thus not be to make the introduced referent a sentence topic. Prince claims that left dislocation is used to introduce a new referent to the discourse when this referent would otherwise have occurred in a position that disfavors discourse-new entities (i.e. subject position). Prince argues that this type of left dislocation has the function of simplifying discourse processing

Several studies on dislocation have looked at it from a discourse-level per-

spective (Ochs Keenan & Schieffelin, 1976; Givón, 1983; Geluykens, 1992; Gregory & Michaelis, 2001). These studies have observed that referents introduced by left dislocation usually continue to be mentioned in one or more utterances following the left dislocation. Givón (1983) measures the average number of clauses following the left dislocation in which the left dislocated referent is mentioned again and refers to this measure as persistence. He measures persistence of various types of referent in a narrative and finds that the persistence score of left dislocated elements is higher than that of other NPs. He concludes that left dislocation is typically used to introduce a new discourse topic.

Geluykens (1992) and Gregory & Michaelis (2001) come to similar conclusions using conversational data. Geluykens (1992) finds that in the great majority of cases of referent-introducing left dislocation, the introduced referent is referred to in at least one following utterance. He also emphasizes that referent introduction is a collaborative process: the speaker wants the addressee to identify and acknowledge the referent before moving on with the conversation. This is the function of the pause following the left dislocated element. Evidence for this function comes from many examples in which the addressee explicitly acknowledges the left dislocated element with an expression such as *yes* or *mhm*. Gregory & Michaelis (2001) find that 59% of all left dislocated elements are referred to in at least one following utterance, which is significantly more than topicalized elements, which are continued in subsequent clauses only 35% of the time. These findings thus all indicate that left dislocation is used to introduce referents as new discourse-level topics.

Ochs Keenan & Schieffelin (1976), Geluykens (1992), Prince (1998) and Gregory & Michaelis (2001) all identify a second function of left dislocation which has something to do with set membership. Geluykens refers to this function as contrast, Prince calls it set-inference triggering and Ochs and Schieffelin refer to it as suggesting alternatives. As I mentioned in Section 1.2.3, there are some authors who define contrast in a broad sense whereas others define it in a narrow sense. Broadly defined, contrast means an indication of the presence of a contextually relevant alternative. Contrast in the narrow sense means that there is a contextually relevant alternative and there is an opposition between the contrast-marked element and this alternative.

Geluykens (1992) claims that left dislocation can be used to mark contrast in the narrow sense. He emphasizes that the cases of contrastive left dislocation involve an opposition and that the contrast is always between two set members only. He does note, though, that there are a few exceptions

of cases that look like contrast but in which more than two set members are contrasted. Prince (1998) (and following her Gregory & Michaelis, 2001), on the other hand, uses the broad notion of contrast in her description of left dislocation. Prince does not call this contrast, but set-inference triggering. She explicitly reserves the term contrast for contrast in the narrow sense. She shows that set-inference triggering left dislocated elements do not have to be in opposition to another element; all that is required is that there is a contextually relevant alternative in the discourse. An example she gives is shown here in (41). In this case the contextually relevant alternative to *Champagnes* is *white Burgundies and premium California chardonnays*. These clearly all form part of a set, but there is no opposition between Champagnes and its alternatives. If anything, the speaker seems to want to emphasize that Champagnes are similar to the other two types of white wine.

(41) *Contrary to popular wisdom that says most white wines (except sweet dessert wines) and Champagnes do not age well, white Burgundies and premium California chardonnays gain intensity and richness after a few years of bottle age. And [Champagnes], well,* ***they*** *acquire a rich, toasty aroma and nutty flavor that I (and the English) prefer to the crisp, acidic fruit of a young sparkler.*
(Prince, 1998, 287)

The studies discussed here differ with respect to whether they analyze the two functions of left dislocation as separate or as different instantiations of a more general function. Prince (1998) argues that the two functions are distinct[5] and left dislocation should not be seen as a phenomenon with a unified function. Gregory & Michaelis (2001), on the other hand, claim that there is one overarching function that encompasses both referent introduction and set-inference triggering. They find that both types of left dislocation tend to be continued as topics in the utterance(s) following the left dislocation. From this they conclude that both types of left dislocation have the function of topic establishment. Geluykens (1992) also suggests that the referent introducing and set-inference triggering (what he calls contrastive) left dislocations may be united under a more general function. This function, he suggests, is referent-highlighting: "the introduction of a referent which is for some reason communicatively salient" (Geluykens, 1992, 158).

In the remainder of this section, I will look into the functions of left dislocation in Avatime. The main functions of left dislocation in English, referent introduction and indicating set membership can both be found in Avatime.

[5]In fact, she identifies a third, also distinct, function, which is to amnesty island violations that may have come about through topicalization. As this function is not relevant for Avatime, which does not have topicalization, I do not discuss it here.

I will argue that these different functions can be unified under a more general function. This is similar to Ameka's (2010) function of frame topic (see Section 4.1), i.e., highlighting of a background element to indicate that it is important to keep in mind for processing of the upcoming discourse.

In my study of the functions of left dislocation, I am not considering the cases of left-dislocated adjuncts. There are two reasons for this. The first is that I want my study to be comparable to the previous work on English, which has not taken initial adjuncts into account. The second reason is that the function of adjuncts in a sentence is fundamentally different from that of arguments, so left dislocated adjuncts could functionally be quite different from other left dislocated elements. For instance, the position of adjuncts is related to their modifying scope (see e.g. Maienborn & Schäfer, 2011).

In the following subsections, I first discuss referent introduction, then set-inference triggering and then some cases that do not seem to fit into the two types.

4.4.2 Referent introduction

In the 165 cases of left dislocation studied, there are 115 left dislocated elements that have not been mentioned in the preceding utterance. These are cases of referent introduction. In 52 of these, there is also set-inference triggering. These cases will be discussed in the next subsection.

In 54 of the 115 cases of referent introduction, the left dislocated element is referred to in the utterance following the left dislocation. These are cases of topic establishment along the lines of Gregory & Michaelis (2001) and Geluykens (1992). A clear case of the introduction of a referent which then becomes an important discourse topic is (42). In line 3, the speaker introduces the maternal uncle, who had not been mentioned in the discourse so far and who continues to be talked about in the following 7 utterances.

(42) A woman talks about harvesting rice.

1 *le de xé be-kusì=la peteé te xé*
C$_{3s}$ back when C$_{1p}$.SBJ-beat=C$_{3p}$.OBJ all like.that and
bɛ-halị̀=la e-xogò=e
C$_{1p}$.SBJ-collect=C$_{3p}$.OBJ SVM-gather=CM
'After this when they beat it (the rice) all and they collect and gather it.'

2 *be-tá-bu sì-vù-se petee*
C$_{1p}$.SBJ-INT-remove C$_{7}$-husk-DEF all
'they will remove all the husks.'

3 *kɔ* [*ɔní* *líyè* *gì* *o-nu* *o-nyre*]
then C_{1s}-person C_{1s}.PROX REL C_{1s}.SBJ-be C_{1s}-maternal.uncle
'Then the person who is a maternal uncle,'

4 [*o-nyre*], ***yɛ́*** *a-tá-tí* *ní* *a-mụ-nà*
C_{1s}-maternal.uncle C_{1s}:FOC C_{1s}.SBJ-INT-take LOC C_{3p}-rice-DEF
abà
on
'the maternal uncle, he is the one who will take first.'

5 *kɔ* *o-nyre* *gì* *a-sɛ̀* *xé* *a-tá-tí*
then C_{1s}-maternal REL C_{1s}.SBJ-leave when C_{1s}.SBJ-INT-take:LOC
a-mụ-nà *abà=ɛ,* *a-tá-vù* *àgba-ɛ* *ki-dí* *líyè*
C_{3p}-rice-DEF on=CM C_{1s}.SBJ-INT-hold bowl-DEF C_{4s}-thing PROX
ki-ku *ye* *aŋwị̀*
C_{4s}.SBJ-please C_{1s} ?
'The maternal uncle who takes rice first will bring a bowl or whatever pleases him.'

6 *kɔ* *xé* *a-nye-dò* *kò=e,* *bá-nɔ̀-a*
then when C_{1s}.SBJ-really-move.out just=CM C_{1p}-person-DEF
ba-lɛ *gbi*
C_{1p}.SBJ-be.at plenty
'When he appears, people are there plenty.'

7 *xé* *a-nye-dò* *kò=e* *bɛ* *petee* *bi-nu*
when C_{1s}.SBJ-really-move.out just=CM C_{1p} all C_{4p}-be
ì-sàmi
C_{2p}-hapiness
'The moment he appears everything is happiness.'

8 *kɔ* *a-sụma* *kɪ́lɛ* *onu* *gì* *áà-tanɔ̀* *kò=e*
so C_{1s}.SBJ-scoop how ? REL C_{1s}.SBJ.POT-be.able just=CM
'He will scoop the amount he can scoop.

9 *kɔ* *bá-nɔ̀* *dzedze-à* *kò* *be-se* *kunì*
so C_{1p}-person different-DEF just C_{1p}.SBJ-run follow
yoò-de
C_{1s}.POSS:C_{6s}-back
'And different people will be there and they will run after him.'

10 *wɔ* *nì* *yɛ* *kị̀-kpafụ́* *wáà-sa=yɛ*
2s and C_{1s} C_{4s}-fist:FOC 2s.SBJ.POT-hit=C_{1s}.OBJ
'They will hit him with their fists.'

11 *wɔ̀-sa=yɛ* *ní* *ì-sàmi-nɛ* *onu*
2s.SBJ-hit=C_{1s}.OBJ LOC C_{2p}-happiness-DEF opening
'They hit him in happiness.' (rice_100613_EN-MM)

In most cases, the introduced referent does not stay active for very long. In 36 out of the 54 cases, the introduced referent continues to be referred to for only 1 or 2 utterances. An example can be seen in (43). In this case, unlike the previous example, the left dislocated element (the beads she wore around her waist, introduced in lines 2 and 3) do not become a major topic of discussion. The beads are part of a short descriptive side-track of the story, which then immediately moves back to the main event of the woman running.

(43) A story about a woman who walks through the forest with her new husband. Suddenly he turns into a snake and she runs away.

1 *èé-se, ɔ-gblaga-è ɔ-lɪ́ ní*
C_{1s}.SBJ.PROG-run C_{1s}-snake-DEF C_{1s}.SBJ-be.at LOC
yò-de
C_{1s}.POSS:C_{6s}-back
'She was running, the snake was behind her.'

2 *kɔ = ɛ [bi-dɛ́mɛ ì-hwìà-lɛ dɔ̀mɛ gì a-kpɛ ní*
then = CM C_{4p}-thing C_{2p}-bead-DEF thing REL C_{1s}.SBJ-wear LOC
ka-sa = ɛ]
C_{6s}-waist = CM
'So the beads and things she put around her waist,'

3 *o, [ì-hwìà-lɛ] ńte ìɪ́-kla ì-glɔ̀-lɛ*
oh C_{2p}-bead-DEF how C_{2p}.SBJ.PROG-count C_{2p}-RECP-DEF
wáà-zǒ-nu kpokponi wawani kpoponi wawani
2s.SBJ.POT-REC-hear kpokponi wawani kpokponi wawani
kpokponi waniwani
kpokponi waniwani
'oh, the beads, how they were counting each other you will be hearing *kpokponi wawani*.'

4 *ì-hwìà-lɛ ìɪ́-hwa ìɪ́-kla*
C_{2p}-bead-DEF C_{2p}.SBJ.PROG-move C_{2p}.SBJ.PROG-count
ì-glɔ̀-lɛ ní ka-sa
C_{2p}-RECP-DEF LOC C_{6s}-waist
The beads were shaking, they were counting each other at her waist.

5 *xé ɔ́-dzɛ e-se e-pè*
and C_{1s}-woman C_{1s}.SBJ-run C_{1s}.SBJ-be.tired
'And the woman ran, she was tired.' (Kadzidzia_110406_AuA)

There are also a number of cases in which a referent is introduced, but not continued at all in the following discourse. In these cases, the function

of left dislocation is not topic establishment in the sense of Givón (1983) and Gregory & Michaelis (2001). In many of these, the introduced referent is a member of a contextually relevant set. These cases are discussed in the next section. There are 22 cases in which a referent is introduced, but it is not continued in the next utterance and is not marked as a set member. An example is (44). Here, the reason for left dislocation could simply be to allow the addressee to process the long descriptive NP (which is completely new in the discourse) before moving on with the sentence. Such a function cannot be explained by topic establishment or set-inference triggering, but is compatible with my more general approach that left dislocation serves to highlight a background element to ease processing of the remainder of the utterance.

(44) One of the organizers of the upcoming rice festival is explaining what will happen on each day of the week-long festival. On Wednesday, there will be talent hunting. Children will participate in running, football and other things.

1 *ńte mè sị̀* [*sportcouncil, bá-nɔ̀-a gì*
like.this inside COMP sportcouncil C_{1p}-person-DEF REL
be-di sports-yè ku-se-se nì bɔ́l ta-ta
C_{1p}.SBJ-look sports-DEF C_{5s}-RED-run and ball RED-hit
bi-dɛ́yà petee abà]
C_{4p}-thing:PROX all on
'So the sports council, the people who are overseeing the sports, running and footballing and these things,'

2 *ba tsyɛ bíà-ba tɔ bíà-tia ba-nùvɔ̀-a*
C_{1p} ADD C_{1p}.SBJ.POT-come PURP C_{1p}.SBJ.POT-select C_{1p}-child-DEF
gì ba bɛ-pɛ̀=ɛ
REL C_{1p} C_{1p}.SBJ-be.good=CM
'they will come and select the children who are good.'

3 *kesekpe li-wè-le li-nu li-wè gì bíà-bị̀tɛ*
thursday C_{3s}-day-DEF C_{3s}.SBJ-be C_{3s}-day REL C_{1p}.SBJ.POT-do
what do you know
what do you know
'Thursday is the day when we will do 'what do you know'.'
(chiefs-meeting_100619_03)

Another example of referent introduction without persistence is line 8 of (45). Here, the left dislocated referent has been introduced as a discourse topic earlier in the discourse, but is then not mentioned for a long time. After that, it is reintroduced to remind the listener that this was the discourse topic, before concluding and moving on to the next topic.

(45) 1 *mi-dzì vì dzɛ̀ tsa li-pó lɛ́-lɔ̀ = ɛ*
1s.SBJ.SBJV-return ask again past C_{3s}-time C_{3s}-DIST = CM
kɔdzi ɔ́-mà kafra lɛ̌ ke-se ke-wlu
hospital C_{1s}.SBJ.NEG-not.be sorry and C_{6s}-ground C_{6s}.SBJ-blow
ɔ́-nɔ̀ = ɛ
C_{1s}-person = CM
'Let me ask again, in those days when there was no hospital and a snake bites a person (literally: the ground blows on a person),'

2 *àwasia wɔ́lí wo-tè àló si-gò-se mè bà-wa*
herb which 2s.SBJ-know or C_7-local-DEF inside C_{5p}-medicine
wɔ́li
which
'Which herbs do you know or which local medicine?'

3 *ní bɛ ka-pa mɛ̀*
LOC C_{4p} C_{6s}-side inside
'In that part,'

4 *ku-waátɔ bí-zɛ̌-xwa sì kpàvìdeme*
C_{5s}-medicine:INDF C_{1p}.SBJ-HAB-call COMP kpavideme
'there is a medicine called kpavideme.'

5 (15 utterances in which there is no reference to snakes, but different medicines are discussed)

6 *lɔ tsyɛ, wáà-tsa ɔ̀-lịlɔ̀-lɔ*
C_{2s} ADD 2s.SBJ.POT-cut C_{2s}-palm.branch-DEF
'That too, you cut the palm branch.'

7 *kɔ wɛ̀ɛ́-ta = ɛ*
then 2s.SBJ.PROG-chew = CM
'And you will be chewing.'

8 *kɔ [ke-se-à ke-wlu wó te] kɔ adiyɛ́*
then C_{6s}-ground-DEF C_{6s}.SBJ-blow 2s like.that then poison
lɔ̀ petee ɔ́-tá-ze-mu tɔ̀ɔ̀
DIST all C_{1s}.SBJ.NEG-INT-IT-ascend anymore
'Then the snake which bit you (literally: the ground which blew on you), the poison will not climb up.' (illness_100616_SO-DS)

According to Prince (1998), English left dislocation is used for referent introduction when the position in which the introduced referent would otherwise occur disfavors new information. This analysis can account for some of the cases of referent introducing left dislocation in Avatime, but not for all. An example that could be explained by Prince's account is (46). Here, the left dislocated element is resumed as a possessor within a focus-marked

phrase (*ba-* in *bahalɔ̀* 'their group', note that the singular left dislocated element gets a plural resumptive pronoun). This is not a place in the sentence in which new information can be made to stand out.

(46) Some women are talking about a certain man who used to drink a lot but gave up drinking recently. After that he turned to religion and went to another church. The speaker in this fragment is describing which church he went to.

1 [*da gì ɛ̀ɛ́-tɔ dɔ̀mɛ́ wlɔ̀ = ɛ*]
sister REL C_{1s}.SBJ.PROG-cook thing:LOC there = CM
'Sister who is cooking things over there,'

2 ***ba**-ha-lɔ̀ mɛ́ sị ye-tsyí*
C_{1p}.POSS:C_{2s}-group-DEF inside:FOC say C_{1s}.LOG.SBJ-turn
e-ku = i
SVM-arrive = CM
'he said he has changed to [their group (church)]$_{FOC}$.'
(conv-rice_110411_3-2)

Even though Prince's account can explain some cases of left dislocation in Avatime, it does not provide a general account for referent introducing left dislocation. Prince notes that referents introduced by left dislocation in English are usually subjects, but this is not the case in Avatime. Of the referent introducing left dislocations that are not set-membership inferencing, 22 are subjects and 24 are objects. Object position is clearly a position that favors new information, so these cases do not fall under Prince's account. An example of an object introduced by left dislocation is line 2 of (47), repeated from (34).

(47) 1 [*bá-nɔ̀ liɔfɔ̀ nì ɔ̀gɔtiabà*] ***bá*** *ba-lí́ present*
C_{1p}-person ten and eight C_{1p}:FOC C_{1p}.SBJ-be.at:LOC present
àló ke-zè-ze mè àblá te
or C_{6s}-RED-sit inside now like.that
'18 people, they are present, or at the gathering right now.'

2 *gì* [*ba kị-bɔ̀-ɛ*] *ki-zɛ = **kɛ***
REL C_{1p} C_{4s}-money-DEF 1p.SBJ-collect = C_{4s}.OBJ
'And their money, we've collected it.'

3 *gì ki-nu cedi àkpe alafa tiata nì àvìteglò*
REL C_{4s}.SBJ-be cedi thousand hundred three and sixty
'And it is 360,000 cedis.' (tribunal_100513_4)

Lambrecht's (1994) explanation that left dislocation is used to promote newly introduced referents to topic status ('what the sentence is about') can

also not explain all the data. As I mentioned in Sections 1.2.2 and 4.4.1, it is not clear how to determine what the sentence is about. Moreover, even intuitively, it does not seem to be the case that the left dislocated elements that introduce referents in Avatime are necessarily elements that the speaker wants to provide information about. In 46 above, for instance, the speaker's goal is not to provide information about the woman who is cooking things. She is providing information about the man, and the woman is only used to make it clearer which church the man went to.

What all cases discussed so far have in common is that left dislocation indicates the introduction of a new referent and thereby a shift in the background against which the discourse is set. Highlighting such a shift might be done to aid comprehension, to make sure the addressee has the correct background in mind before moving on with the conversation. Geluykens (1992) shows evidence from English for such a process of mutual acknowledgment of the introduced referent by taking into account the addressee's response to the left dislocated element. The addressee frequently acknowledges the introduced referent, usually using an interjection such as *yes* or *mhm*. Similar cases can be found in Avatime. For the purpose of studying the phenomenon of acknowledgment, only the conversational and interview data were taken into account, as the public meetings and narratives provide less opportunity for interaction. This subset of the data contains 71 cases of referent-introducing left dislocation. Out of these, 30 were in some way acknowledged by the addressee. An example can be seen in (48), where speaker B indicates his recognition of the referent with the interjection *mmm*.

(48) A man is interviewed about traditional cures for illnesses. He describes how somebody he knows used to cure fever. This person would first drink tea from dried pawpaw leaves.

1 A: *le* *de* [*kùkwie* *tsìtsì-e*]
C_{3s} after pepper old-DEF
'After that, old pepper,

2 B: *mmm*

3 A: ***yɛ*** *tsyɛ* *yáà-hɔ=ɛ*
C_{1s} ADD C_{1s}.SBJ.POT-grind=C_{1s}.OBJ
'that, too, he will grind it.' (illness_100616_SO-DS)

4.4.3 Set membership

Out of the 167 cases of left dislocation, 82 are members of a set, another member of which is also mentioned or evoked in the discourse. Many of

these are also introduced referents: there are 52 cases in which a referent is both a set member and has not been mentioned in the immediately preceding utterance. Out of these cases, 26 are referred to again in the utterance following the left dislocation. These cases can thus be analyzed as both topic establishment and set-inference triggering.

An example of a set-membership inferencing left dislocation in which the referent is introduced and continues to be mentioned afterwards is line 2 of (49). Here, the introduced referent 'the Vane people who are in town' is a member of a contextually relevant set. The other set member is 'the people who are not in town' (i.e. people who come from Vane and who now live elsewhere), referred to in line 6.

(49) At a meeting about the upcoming rice festival, somebody asks how much money people should pay for the festival.

1 *ee lósò mí-kpesé ɔ̀vanɔ̀*
yes so 1s.SBJ.SBJV-start:LOC Vane
'So let me start in Vane (the town in which the festival is to be organized).'

2 [*ba-vanàa gì balí ní ɔ̀-mà-nɔ mɛ̀=ɛ*]
C_{1p}-Vane:DEF REL C_{1p}.SBJ-be.at LOC C_{2s}-town-DEF inside=CM
'The Vane people who are in town,'

3 ***ɔ-kákaa*** *ɛ̀ɛ́-dzɔ cedi tie-tsu*
C_{1s}-each C_{1s}.SBJ.PROG-contribute cedi C_{1p}-five
'each person is contributing five cedis.'

4 *gì ki-nu cedi àkpɛ avìtetsu ki-kóko-e mè*
REL C_{4s}.SBJ-be.at cedi thousand fifty C_{4s}-old-DEF inside
'Which is 50.000 cedis in the old currency.'

5 *wɔ̀-lí ɔ̀-má lɔ́-ya mɛ̀ kɔ*
2s.SBJ-be.at:LOC C_{2s}-town C_{2s}-PROX inside then
wɔ̀-tá-tsa=kɛ
2s.SBJ-INT-pay=C_{4s}.OBJ
'If you are in this town, you pay it.'

6 *xé wɔ́-mà ɔ̀-mà-nɔ mɛ̀ pɔ̀=ɛ*
if 2s.SBJ.NEG-not.be C_{2s}-town-DEF inside CTR2=CM
wɔ̀-tá-tsa cedi lɪɔfɔ̀ gì ki-nu cedi àkpe alafa
2s.SBJ-INT-pay cedi ten REL C_{4s}-be cedi thousand hundred
ní ki-kóko-e mè
LOC C_{4s}-old-DEF inside
'If you're not in the town, you pay 10 cedis, which is hundred thousand cedis in the old currency.' (chiefs-meeting_100619_03)

An example of a newly introduced referent that does not continue to be mentioned is (50). Here, *samalin* is left dislocated and explicitly marked as contrastive with the particle *pɔ̀* (see Section 4.2.3 and Chapter 5).

(50) Three women are chatting about sickness. Speaker A mentions that her grandson is coughing a lot despite all the medicines she bought for him.

1 A: *mè-dzi zubes-yè mè-dzi septrin*
1s.SBJ-buy zubes-DEF 1s.SBJ-buy septrin
'I bought zubes (name of a medicine), I bought septrin (another medicine).'

2 *lósò ke-mizá yà mà-zɛ̌-dzi, kítɛ do=e, mb-ye*
so C_{6s}-afternoon PROX 1s.SBJ-REC-buy how say=CM MB-DEF
mà-hɔ kpé ku-wa mè
1s.SBJ-grind put.in:LOC C_{5s}-medicine inside
'So this afternoon I went and bought, what's it called, MB and ground it into the medicine.'

3 *xé mà-kị=yɛ xé me-dò za àbla*
and 1s.SBJ-give=C_{1s}.OBJ and 1s.SBJ-move.out pass now
'And I gave it to him before I came out now.'

4 *mè-dzi=wa petee tɔ nya likademe dzro*
1s.SBJ-buy=C_{1p}.OBJ all PURP really (Ewe?) (Ewe?)
'I bought them all with the hope that it will be better at least.'

5 B: [*samalin-yè pɔ̀=ɛ*], *nyàfɛ a-sa gagla kí=yɛ*
samalin-DEF CTR2=CM maybe C_{1s}.SBJ-hit strong give=C_{1s}.OBJ
'As for the samalin, maybe it is too strong for him.'

6 C: *lị-wɔ-lɛ mɛ́ lị-lɛ́ té lo*
C_{3s}-air-DEF inside:FOC C_{3s}.SBJ-be.at like.that FP
'It is the weather which is like that.' (conv-street_100720_2)

An example of a referent that is marked as a set member but not newly introduced can be seen in (51), repeated from (23). Here, the left dislocated element in line 3 is a pronoun, referring to the 'other weeds' that were introduced in the previous sentence. It is marked with the particle *tsyɛ* to indicate that what is said about it is the same as what has been said about an alternative, i.e. both sets of weeds will be removed.

(51) 1 *xé kui-sɔ pɔ́=ɛ ki-tá-halì sì-wa-sɛ̀*
when 1p.SBJ-sow COMPL=CM 1p.SBJ-INT-collect C_7-weed-DEF
petee ní ɔ̀-nyɔ-nɔ mɛ̀
all LOC C_{2s}-farm-DEF inside
'When we finish sowing, we collect all the weeds from the farm.'

2 *gì* *sì-wa-sɛ̀* *ki-halì* *ede-a=ɛ* *sí-tɔ*
when C_7-weed-DEF C_{4s}-collect back-DEF=CM C_7-INDF
si-tá-dzì *ta* *dzɛ̀*
C_7.SBJ-INT-return ? again
'After collecting those weeds, others will come up again.'

3 [*bɛ* *tsyɛ*] *kị-tá-kpaị̀=**bɛ*** *petee* *bu*
C_{4p} ADD 1p.SBJ-INT-uproot=**C_{4p}.OBJ** all remove
'Those ones, too, we will remove them all.' (rice_100613_EN-MM)

Set-inference triggering left dislocations may be marked with an additive or contrastive particle (see Section 4.2.3 and Chapters 5 and 6) or they may be unmarked. Example (49) above is an example of the latter, example (50) shows a contrastive particle and example (51) shows an additive particle. Altogether, out of the 82 cases of set-inference triggering left dislocations, 41 are marked with an additive or contrastive particle.

Examples (49) and (50) above are examples of contrast in the narrow sense. As I mentioned in Section 4.4.1, this means marking something as being in opposition to a contextually relevant alternative set member. In (49), there is an opposition between the two set members (the two groups of people) with respect to how much money they have to pay for the festival. In (50) there is an opposition between *samalin* and the other medicines mentioned in the sense that unlike the others, samalin is too strong for a small child. These cases are contrastive in the sense of Geluykens (1992). However, cases such as (51) show that this narrow notion of contrast is not a necessary condition for left dislocation. The additive particle indicates that what is said about both set members is identical (both types of weeds will be removed). There is thus no opposition between the two set members. This means that Prince's more general notion of triggering a set inference can account better for the Avatime cases than a narrowly defined notion of contrast.

4.4.4 Other cases

There are 24 cases of left dislocation in which the left dislocated element is not newly introduced but is also not a member of a contextually relevant set.

In 10 cases, the referent to which the left-dislocated element refers was mentioned in the immediately preceding utterance by a different speaker. An example of this is (52). Here, speaker A introduces mango bark and speaker B responds with an utterance in which mango bark is left dislocated. Clearly, the reason for left dislocation cannot be to introduce the referent. However, it does look like a case of topic establishment, as the referent is

acknowledged by speaker A (in line 3) and speaker B continues to talk about it. The left dislocation here could be an indication by speaker B that he has indeed taken up the discourse topic suggested by speaker A. Cases such as this thus seem to be special cases of topic establishment.

(52) 1 A: *bá-nɔ̀ á-tɔ tsyɛ bí-zě-do sị̀ bí-zě-bị̀tɛ*
C_{1p}-person C_{1p}-INDF ADD C_{1p}.SBJ-HAB-say COMP C_{1p}.SBJ-HAB-do
maŋgo-è kù-po
mango-DEF C_{5s}-bark
'Some people say they use mango bark.'

2 B: [*maŋgo-è kù-po = e*]
mango-DEF C_{5s}-bark = CM
'Mango bark,'

3 A: *mhm*

4 B: ***kɔ*** *tsyɛ, wáà-zɔ̌-ta = kɔ*
C_{5s} ADD 2s.SBJ.POT-REC-chew = C_{5s}.OBJ
'that too, you'll be chewing it.' (illness_100616_SO-DS)

There are two other cases of left dislocation that behave like cases of topic establishment despite the absence of an introduced referent. These are both cases from an interview about traditional medicine. The man who is interviewed lists a number of different illnesses and different cures. When he starts talking about a new medicine or a new illness, there is a shift of background and new background elements are established. In the two cases discussed here, the speaker seems to have finished talking about a certain medicine used for a certain illness, but then continues talking about the same medicine and its use for another purpose. An example can be seen in line 4 of (53). The reason for topic establishment despite the topic being active could be that in a new episode, the topic is not necessarily expected to be continued and it is highlighted to indicate that it does. The particle *ke* 'the same' is used to indicate that the introduced discourse topic is not new.

(53) 1 *kù-nyá lɔ̀ di, ki-díyɛ̀*
C_{5s}-t.o.medicine DIST particular C_{4s}-thing:PROX
kí-zɛ̌-kpokponu = e
C_{5s}.SBJ-HAB-chase = CM
'That kunya, the thing it chases away,'

2 *xé kù-wè-o kìí-kpɛ = wɔ*
if C_{5s}-fever-DEF C_{5s}.SBJ.PROG-put.on = 2s.OBJ
ku-nugu-yò = e bíà-tanì kɔ vù
C_{5s}-trouble-DEF = CM C_{1p}.SBJ.POT-be.able C_{5s} hold
'If fever is troubling you, they can squeeze it.'

3 (three utterances in which kunya continues to be mentioned)

4 [*kù-nya* *ke*] *wáà-duku=**ko*** *kpɛ́*
C_{5s}-t.o.medicine same 2s.SBJ.POT-squeeze=C_{5s}.OBJ put.in:LOC
kụ̀-da *mɛ̀* *ke*
C_{5s}-drink inside same
'The same kunya, you squeeze it into the palmwine.'

5 *vevietɔ* *xé* *klayi-è* *e-dò* *ní* *wɔ* *sụ-yɛ*
especially if t.o.disease C_{1s}.SBJ-move.out LOC 2s side-DEF
'Especially if you have klayi (a skin disease).'

6 *bíà-vù=ko* *kpɛ* *ní* *kụ̀-da* *mɛ̀*
C_{1p}.SBJ.POT-hold=C_{5s}.OBJ put.in LOC C_{5s}-drink inside
'They will squeeze it into the palm wine.' (illness_100616_SO-DS)

There are three cases in which two previously mentioned referents are combined into one noun phrase. The combination of the two as one phrase is thus newly introduced, so these cases could also be viewed as referent introduction. An example is (54).

(54) 1 *lɛ́* *àblé* *bá-yà=ɛ*
and now C_{1p}-PROX=CM
'And now these ones (youth).'

2 *gì* *ɔ̀-kɔ* *káka* *gì* *wɔ-mɔ̀* *ó-nyime* *kò=e*
and C_{2s}-place every REL 2s.SBJ-see C_{1p}-man just=CM
'Everywhere when you see a man,'

3 *kɔ* *ɔ-lɪ́* *wo-le* *kò*
and C_{1s}.SBJ-be.at:LOC 2s.POSS:C_{2s}-taste just
'and you like that man,'

4 *ko* *kɔ* [*wɔ* *nì* *yɛ*] *kɔ* *àblá* *te* *kò* *kɔ*
just then 2s and C_{1s} then now like.that just then
mla-gbanì *mla-hanìgòla=ɛ*
2p.SBJ-marry 2p-RECP=CM
'then the two of you, just now, then you marry each other.'

5 *ńte* *li-tá-zè* *kɪ́=blɔ* *tsyɛ* *li-wèétɔ*
like.that C_{3s}.SBJ-INT-be.NONPRES give=1p.OBJ ADD C_{3s}-day:INDF
'That is how it will be for us too one day.' (Kadzidzia_110406_AuA)

In at least one case, shown in (55), left dislocation seems to be used as a reminder of the discourse topic, even though it is not going to be mentioned anymore in the following utterances. This is thus similar to cases such as (45), described in Section 4.4.2. In example (55), money has just been mentioned, but after that, a second prominent referent is introduced,

'the kedeme people who will be on the committee'. To indicate that money is still the main discourse topic under discussion, it is left dislocated within the purpose clause in line 4.

(55) In a public meeting about the upcoming rice festival, somebody is asking one of the organizers how much money people will have to contribute to the festival.

1 *ki-bɔ̀-ɛ* *li-bo-lɛ̀,* *ki-dó* *ki-do* *sị̀*
C_{4s}-money-DEF C_{3s}-matter-DEF C_{4s}-say:FOC 1p.SBJ-say COMP
'Money matters, we said that...'

2 *xé* *ki-bá* *yà=ɛ*
when 1p.SBJ-come here=CM
'when we come here,'

3 *kedaná* *yà* *gì* *ba-tá-zɛ̀* *ní*
Avatime.people PROX REL C_{1p}.SBJ-INT-be.NONPRES LOC
committee *abà*
committee on
'the Avatime people who will be on the committee,'

4 *blɔ* *petee* *kíà-tsa* *tɔ* [*ki-bɔ̀-ɛ*],
1p all 1p.SBJ.POT-meet PURP C_{4s}-money
*bíà-lɛ=**kɛ*** *kị́* *ɔ̀-mà* *káka*
C_{1p}.SBJ-share=**C_{4s}.OBJ** give C_{2s}-town every
'we will all meet so that the money will be shared to every town.'

5 *níte* *ki-do* *li-wé* *lɛ́-lɔ̀*
like.that 1p.SBJ-say C_{3s}-day C_{3s}-DIST
'That is what we said that day.' (chiefs-meeting_100619_03)

In several other examples, such as (56), it is not clear why left dislocation is used. The left dislocated element here is the food that the old man was eating, mentioned in line 3, which was already a discourse topic before it is left dislocated here. There is no change of episode and no change of speaker and set membership does not seem to play a role.

(56) In a folk tale, some women are throwing porridge to an old man, which he catches with his mouth and swallows. At some point, the main story character, who is very hungry, jumps out of the bush and tries to catch the porridge. He catches it, but because of the force with which the porridge was thrown, he ends up in the old man's mouth.

1 *li-trɛ* *ní* *ɔ-kàtsì-e* *ò-nugu-lo* *mɛ̀* *kò*
C_{3s}.SBJ-go LOC C_{1s}-old.man-DEF C_{2s}-mouth-DEF inside just
'It went into the old man's mouth.'

2 *á-kɔ a-mlɔ̀ = ɛ*
C_{1s}.SBJ-take SVM-swallow = CM
'He swallowed it.'

3 *o, àblá = ɛ [bị-dɔ̀-mɛ gì ɔ-kàtsị̀-ɛ*
oh now = CM C_{4s}-thing-DEF REL C_{1s}-old.man-DEF
èɛ́-ŋà] kò sị yɛ li-po mè yɛ li-po
C_{1s}.SBJ.PROG-eat just say C_{1s} C_{3s}-stomach inside C_{1s} C_{3s}-stomach
mè yɛ li-po mè
inside C_{1s} C_{3s}-stomach inside
'Now the food the old man was eating, now the man said his stomach his stomach, his stomach.'

4 *bu ɔ-kàtsì-e kó é-tsé*
ID C_{1s}-old.man-DEF only:FOC C_{1s}.SBJ-die
'Just then the old man died.' (kadzidzia_110406_QM)

4.4.5 Analysis

In this section, I have shown that the two major functions found for left dislocation in English, referent introduction and set-inference triggering are also functions of left dislocation in Avatime. When left dislocation is used for referent introduction, the introduced referent is often, but not always, continued as a discourse topic. Set-inference triggering left dislocation often includes the use of additive and contrastive particles. There are many cases in which the left dislocated element is both introduced and indicates set membership, but there are also cases of set-inference triggering left dislocation in which the left dislocated element is not being introduced. There are several cases that seem to involve neither referent introduction nor set-inference triggering.

In Section 4.4.1 I mentioned that I analyze Avatime left dislocation as having a more general function that unifies the two functions mentioned. Roughly speaking, this function is highlighting of a background element to indicate that it is important to keep in mind for processing of the upcoming discourse (see also Ameka's (2010) notion of frame topic). In the remainder of this subsection, I will discuss how this general function can account for the observed cases and I will discuss some possible counterexamples.

To make it clearer what the function I propose intends to capture, some clarification of the term background is needed. What I mean with the background is the set of entities and propositions against which the utterance is interpreted. This definition is similar to Klein's (2008) notion of the 'topic situation'. The relationally new information in the sentence (i.e. information

focus, see Chapter 3) is not part of the background. Not all of the background is explicitly mentioned in every utterance; part of it (such as the time and place of the event) may remain implicit. The background information that is mentioned in a particular utterance functions to form a link between the focused information and the knowledge the addressee already has; it allows the addressee to situate the utterance. This background information therefore has to be identifiable to the addressee (see also Gundel's (1985, 87) topic identifiability principle) and is usually information that is already in the addressee's consciousness. Background elements are usually not linguistically prominent, because they tend to stay the same throughout a stretch of discourse and only serve as pointers for the interpretation of the focused information. However, there can be reasons for highlighting a background element. In these cases, I argue, Avatime speakers use left dislocation.

One reason for highlighting a background element is that it is not in the addressee's consciousness but should still be treated as background information. This reason accounts for the cases in which left dislocation seems to be used for referent introduction. Introducing a new referent cannot by itself be a reason for left dislocation, as new referents are frequently introduced in the focused part of the utterance. Left dislocation indicates that the introduced referent is part of the background.

Another reason for highlighting a background element and thereby indicating that it is important for the processing of the remainder of the utterance is that this element is compared to a set member that has been mentioned before or can be inferred. Highlighting such an element makes sure that the addressee can activate the appropriate set member and properly integrate the remainder of the utterance with previous knowledge.

At first sight, there seem to be a few cases of left dislocation that pose a problem to this analysis. These are the cases in which a referent is left dislocated and then marked for focus within the same sentence. An example was shown in (42) in Section 4.4.2. These cases were also discussed in Section 3.2.3 in the previous chapter. These cases could be problematic, because focused elements are usually considered the part of the sentence that is not in the background (see also Section 3.1). However, as I have shown in Chapter 3, focus-marked elements in Avatime are almost always contrastive. This means they are marked because they contrast to an expectation or a similar situation, not because they are new in the discourse. It is thus not redundant to introduce a referent into the discourse via left dislocation and then mark it for focus to indicate it is contrastive.

4.5 Summary

In this chapter I described the grammatical properties and functions of left dislocation in Avatime. In Section 4.2 I described how left dislocation can be identified in Avatime and what kinds of elements can be left dislocated. Left dislocated elements can be identified by the occurrence of a resumptive pronoun in the remainder of the sentence or by their occurrence in a position before the subject and focused element. Unlike what is usually proposed for English, resumptive pronouns are not necessary in Avatime left dislocation. This is because Avatime allows the dropping of arguments. Without resumptive pronouns as a necessary criterion, sentence-initial adjuncts and so-called Chinese-style topics are also considered left dislocated. This raises questions for the theory of left dislocation in general: what phenomena fall under the notion of left dislocation and how are they related? Is it possible to come up with a definition of left dislocation that is crosslinguistically applicable? Can there be a unified syntactic analysis of left dislocation in different languages?

One possibly unifying property of left dislocation is that the elements that are left-dislocated occur outside the main clause. This explains the prosodic break that frequently follows left dislocated elements and the resumptive pronouns. It has been suggested that left dislocated elements function like stand-alone utterances and are linked to the following clause by a general mechanism of discourse linking (Ochs Keenan & Schieffelin, 1976; Shaer, 2009). However, if this were the case, left dislocation would not be expected to occur inside subordinate clauses, as only single units can be subject to subordination.

The discussion in Section 4.3 shows that in Avatime, left dislocation does occur inside subordinate clauses. This means that the left dislocated element has to be analyzed as syntactically linked to the following clause, forming a unit with it. In the framework of Role and Reference Grammar, this is captured by the left detached position, which combines with a clause to form a sentence. If subordinate structures are analyzed as being sentences, rather than clauses, the phenomenon of subordinate left dislocation can be accounted for within this framework. Of course, these findings raise the question whether left dislocation in subordinate clauses is a phenomenon particular to Avatime or occurs more generally in the languages of the world. A related question is whether the possibility of left dislocation in subordinate clauses is tied to other properties of the language. Based on my intuition as a native speaker, left dislocation within subordinate clauses in Dutch sounds very bad, possibly because the word order in subordinate clauses is different from that in main clauses. However, as grammaticality judgments do not

necessarily correspond to what people actually do, additional corpus study is needed. More detailed research into left dislocation and subordination in different languages will shed light on these questions.

The final issue I looked into in this chapter is the function of left dislocation, discussed in Section 4.4. Like in English, left dislocation is often used to mark newly introduced or reintroduced referents and to indicate set membership. These two functions can be united in a more general function for left dislocation, which I based on Ameka's (2010) notion of frame topic. This is highlighting of a background element to indicate that it is important to keep in mind for processing of the upcoming discourse. Even though adjuncts have been left out of the discussion of the function of left dislocation, they seem to fit in with this analysis: using a sentence-initial spatial or temporal adverbial is usually an indication of a change in the background - the following utterance will be situated in a different place or time. This hypothesis needs to be tested by more research into the functions of adjuncts in Avatime. A more general question raised by the general function proposed here is whether it could also account for left dislocation in English and perhaps other languages. The marked structure of initial position and separation from the remainder of the utterance seem to make left dislocation ideal for the function I propose and it would therefore not be surprising to find very similar functions in many other languages.

CHAPTER 5

Contrastive particles

5.1 Introduction

In this chapter I discuss the syntactic distribution and meaning of three contrastive particles: *kɔ*, *pɔ̀* and *xunyɔ*. I also briefly discuss two contrastive pronouns: *mɔ* for first person singular and *yɔ* for third person singular. An example of the particle *xunyɔ* can be seen in (1).[1]

(1) 1 *kù-sɔ̀ì-ɔ̀* *tù-bà* *kì-yi*
C6p-basket-DEF C6p-two C6p.SBJ-full
'Two baskets are full.'

2 *pɔ̀* *tì-le* ***xunyɔ*** *ká-yi* *sukɔ̀*
but C6s-one CTR3 C6s.SBJ.NEG-full yet
'But one (*xunyɔ*) is not yet full.' (pear_100517_MM-BK-FK)

The particles usually associate with a constituent in the sentence (*tìle* 'one' in (1)), which is most often a noun phrase. The particles occur at the end of the constituent they associate with (see Section 2.3.2). Some particles can also occur sentence-finally, associating with the sentence as a whole.[2]

All three particles and pronouns clearly express contrast. However, it is not clear what contrast exactly means. There are different definitions of

[1] The contrastive particles are difficult to translate into English. Whenever there does not seem to be an appropriate way to translate them, I add the particle in parentheses in the translation line of the example, immediately following the element it associates with. Avatime speakers often translate the contrastive particles into English as 'as for'. Whenever possible I use these translations instead of adding the particle to the translation line.

[2] The term *associate* indicates a semantic relation between the particle and an element in the sentence. In Avatime, this corresponds to a syntactic relation. However, in other languages such as English, there is not necessarily a one-to-one correspondence between syntactic position and association: focus-sensitive particles such as *also* associate with the focused element in the sentence, which is not necessarily adjacent.

contrast in the literature, but most of these are not very precise. An overview will be presented in Section 5.3.1. A distinction is usually made between contrastive focus and contrastive topic (see e.g. Repp, 2010). The Avatime particles look like markers of what has been called contrastive topic. This has also been noted by researchers studying related Kwa languages with similar particles. Ameka (2010) describes similar particles in Ewe as playing a role in the marking of contrastive topics and Amfo (2010) describes the Akan particle *de* as a contrastive topic marker.

In this chapter, I want to investigate the function of these Avatime particles in more detail. This investigation is based on two main research questions:

1. What is the syntactic distribution of the contrastive particles?
    - With what kinds of elements do they associate?
    - Are there differences in syntactic distribution between them?
2. What meaning do the contrastive particles express?
    - Can they be characterized by some definition of contrast that has been proposed in the literature?
    - Are there differences in meaning between them?

The first question will be taken up in Section 5.2, where the syntactic properties of each particle are discussed in turn, followed by a summary of similarities and differences. The data on which this discussion is based comes from my 7-hour corpus of spontaneous speech (see Section 1.4). Every now and then I complement the corpus data with data from grammatical elicitation. In Section 5.3, I discuss the meaning of the particles. The data for this section comes from a subset of the corpus of spontaneous speech. I start the section with a brief overview of the various definitions of contrast that have been put forward. In Section 5.4, I discuss some remaining issues and summarize my findings.

5.2 Syntactic distribution

5.2.1 The particle *kɔ*

The particle *kɔ* is the most frequent contrastive particle, occurring 140 times in the entire Avatime corpus. An example of its use can be seen in (2). Here, *kɔ* associates with the personal pronoun *yɛ*, which refers to the third brother and functions as the subject of the sentence.

(2) From a story about three brothers in a burning house. Firemen urge them to jump out of the windows but the first two brothers are too afraid to jump. Then the firemen ask the third brother to jump.

1 *á-yɔ ple, bɛ-sɔ́lị́=yɛ nì ba kù-sà*
C_{1s}.SBJ-jump descend C_{1p}.SBJ-catch=C_{1s}.OBJ LOC C_{1p} C_{5s}-cloth
gàglàá kɔ́wlɔ̀a
strong there
'He jumped down, they caught him with their strong cloth.'

2 *te mè sị̀ yɛ **kɔ** e-dò ní lɛ mɛ̀*
like.that inside COMP C_{1s} **CTR1** C_{1s}.SBJ-move.out LOC C_{3s} inside
'So he (kɔ) got out of it.' (FinSto_100524_SO)

Table 5.1 shows the syntactic distribution of *kɔ*-marked elements. The types of element that are marked by *kɔ* most frequently are in-situ subjects and left-dislocated NPs and adjuncts. What these elements all have in common is that they are sentence initial.[3]

Table 5.1: The distribution of the contrastive particle *kɔ*.

Host	Count	Percentage
subject in-situ	66	47
left-dislocated NP	41	29
left-dislocated adjunct	30	21
postverbal adjunct	2	1
postverbal NP	1	1
total	*140*	*100*

The particle *kɔ* associates most commonly with the subject of the sentence. An example of this is shown in (2) above. The second most frequent host of *kɔ* are left dislocated noun phrases (see Chapter 4 for more information on left dislocation in Avatime). An example can be seen in (3). Here, the left-dislocated element is crossreferenced in the main clause with a resumptive pronoun (*lɛ*), which is the object of the verb.

(3) *lɛ lósò [lɛ́-lɔ̀ **kɔ**] kui-kɔ̀=lɛ kị́ blɔ ɔ-kà bìdi=yè*
so C_{3s}-DIST **CTR1** 1p.SBJ-take=C_{3s}.OBJ give 1p C_{1s}-father big=DEF
'So as for that one, we have given it to our big father (the chief).'
(chiefs-meeting_100619_03)

[3]These elements can still be preceded by other left-dislocated elements, so they are not necessarily strictly sentence-initial. However, in the actual corpus, there are only 5 cases in which these elements marked by *kɔ* are preceded by another element.

There are also some examples of so-called Chinese-style left dislocations (see Chafe (1976) and Chapter 4), i.e. left-dislocated NPs that have a semantic relation to the main clause but do not play a grammatical role in it. An example of Chinese-style left dislocation marked with *kɔ* can be seen in (4).

(4) [*bɛ́-yà* ***kɔ***] *mó-dzi* *outer*
C$_{4p}$-PROX **CTR1** 1s.SBJ.NEG-buy outer.tyre
'As for this one (car), I won't buy an outer tyre.'
(conv-home_100716_SO-EA-AS)

The third type of constituent that *kɔ* frequently associates with is the left dislocated adjunct. The most common adjunct marked with *kɔ* is the adverb *àbla* 'now', used with the particle to indicate a contrast with respect to different times. An example can be seen in (5), where what happened in the past is described as different from what is happening now. The frequent co-occurrence of *àbla* and *kɔ* has even given rise to the fused form *àblɔ*, which can be used in combination with the particle, as in (5), or by itself.

(5) The speaker, who is an older woman, just explained that she and her parents, brothers and sisters all used to farm rice.
lɛ̌ *àblɔ* ***kɔ*** *ble-bi-à* *tsyɛ* *bɛ̀ɛ́-wà*
and now **CTR1** 1p.POSS:C$_{1p}$-child-DEF ADD C$_{1p}$.SBJ.PROG-do
à-xwɛ̀-na *ní* *ì-kɔ̀-lɛ*
C$_{3p}$-work-DEF LOC C$_{2p}$-place-DEF
'Now (*kɔ*) our children are working outside the village too.'
(rice_100613_EN-MM)

There are only three cases of *kɔ* marking a postverbal element. Two of these are adjuncts, both instances of *ablɔ kɔ*, one of which can be seen in (6). The other one is an object (7). This *kɔ*-marked object is the resumptive pronoun for a left-dislocated element marked with another contrastive particle.

(6) *a-gbanì* *ɔ́-dzɛ* *àblɔ* ***kɔ***
C$_{1s}$.SBJ-marry C$_{1s}$-woman now **CTR1**
'He has now (*kɔ*) married the woman.' (famprob_110401_MeD-BeK_story)

(7) *pɔ̀* *mɔ* *xunyɔ* *ɔ́nɛnɛ* *ɔ́-ba* *mɔ* ***kɔ***
but 1s CTR3 nobody C$_{1s}$.SBJ.NEG-come 1s.CTR **CTR1**
'But as for me, nobody came to me (*kɔ*).' (chiefs-meeting_100619_03)

In the corpus of spontaneous speech, *kɔ* always associates with a noun phrase, adpositional phrase or adverb. There are no examples of it associating with a predicate or clause. However, in elicitation some consultants have judged immediately postverbal and clause-final *kɔ* to be grammatical. Others consider *kɔ* in these positions ungrammatical.

Kɔ does not associate with focus-marked elements and this is judged ungrammatical by all speakers consulted (8).

(8) A: 'My mother and my aunt were both hungry, so I made soup for them.'
B: 'Did you give the soup to your aunt?' A:

o, mo-ne* ***kɔ́* *mà-kị* *ò-ni-nɔ̀*
no 1s.POSS:C_{1s}-mother **CTR1:FOC** 1s.SBJ-give C_{2s}-soup-DEF
Intended meaning: 'No, I gave the soup to [my mother (*kɔ*)]$_{FOC}$.'
(elic-ctrpart_130812_SO)

The contrastive particle *kɔ* is homophonous with the clause connector *kɔ* 'then'. An example of the clause connector *kɔ* is (9), repeated from Section 2.8.2, where the use of the connector is described in more detail.

(9) The speaker is explaining to a meeting what will happen at an event they are planning later that year.

kui-tè *sị̀* *bíà-kpese* *dɔ̀mɛ* *ní* *gbàdzɛmɛ̀* ***kɔ*** 1p.SBJ-know COMP 1p.SBJ.POT-start thing LOC Gbadzeme **and**
bɛ-bá *bàbìàkpa=**ɛ***
C_{1p}.SBJ-come:LOC Biakpa=CM
'We know that they will start the thing in Gbadzeme (an Avatime village) and then they will come to Biakpa (another Avatime village).'
(chiefs-meeting_100619_03)

Further research needs to determine in what way the connector and the contrastive particle are historically related. In any case, it is clear that they are different lexical items synchronically: the connector *kɔ* occurs clause-initially, whereas the contrastive particle *kɔ* occurs at the end of a constituent.

5.2.2 The particle *xunyɔ*

The particle *xunyɔ* occurs 68 times in the corpus. Like *kɔ*, it most frequently associates with sentence-initial constituents. An example can be seen in (10), repeated from (1), in which *xunyɔ* associates with the subject of the clause.

(10) 1 *kụ̀-sɔ̀ị̀-ɔ̀* *tụ̀-bà* *kì-yi*
C6p-basket-DEF C6p-two C6p.SBJ-full
'Two baskets are full.'
2 *pɔ̀* *tì-le* ***xunyɔ*** *ká-yi* *sukɔ̀*
but C6s-one **CTR3** C6s.SBJ.NEG-full yet
'But one (*xunyɔ*) is not yet full.' (pear_100517_MM-BK-FK)

Table 5.2 summarizes the syntactic distribution of *xunyɔ* (for a comparison to the distribution of *kɔ* see Table 5.5 in Section 5.2.5). Similarities to *kɔ* are its frequent occurrence with subjects and left-dislocated elements and its rare occurrence with postverbal elements.

Table 5.2: The distribution of the contrastive particle *xunyɔ*.

Host	Count	Percentage
subject in-situ	29	43
left-dislocated NP	20	29
left-dislocated adjunct	2	3
postverbal NP	1	1
clause	16	24
total	*68*	*100*

Example (11) shows *xunyɔ* associating with a left-dislocated element, *tole* 'one'. The remainder of the sentence contains a repetition of this noun as the object of the verb. The only example of *xunyɔ* associating with a non-initial NP can be seen in (12).

(11) *a-kị́=ba* *to-le* *to-le* *lɛ̌* [*to-le* ***xunyɔ***] *á-kɔ*
C1s.SBJ-give=C1p.OBJ C1s-one C1s-one then C1s-one **CTR3** C1s.SBJ-take
to-le *kpɛ́* *yɛ* *kòtòku-ye* *mè*
C1-one put:LOC C1s.POSS pocket-DEF inside
'He gave them one each and one (*xunyɔ*), he put one in his pocket.'
(pear_100517_MM-BK-FK)

(12) *lɛ̌* *a-tɛ-kɔ* *ɔ-kà-ɛ* *yɛ* ***xunyɔ*** *yɛ* *bị-nɛ*
then C1s.SBJ-IT-take C1s-father-DEF C1s **CTR3** C1s C4p-POSM
'Then he went to steal the man's (*xunyɔ*) things.'
(kadzidzi_ET_20110827_3)

Unlike *kɔ*, *xunyɔ* rarely associates with adjuncts. Also unlike *kɔ*, *xunyɔ* frequently associates with the entire clause. An example can be seen in (13).

(13) *wáà-ŋwɛ̀,* *bị-lị́* *titi* ***xunyɔ***
2s.SBJ.POT-drink C_{4p}.SBJ-be bitter **CTR3**
'You will drink, it is bitter though.' (illness_100616_SO-DS)

Xunyɔ does not occur in immediately postverbal, but not sentence-final position. This does not occur in the corpus and is judged ungrammatical by consultants (14).

(14) Context: 'Kofi wants to go.'
mà-pɛ* ***xunyɔ* *sị̀* *o-zɛ̀*
1s-want **CTR3** COMP C_{1s}.SBJ.SBJV-be.NONPRES
Intended meaning 'But I want him to stay.' (elic-ctrpart1_130806_AB)

Xunyɔ can also not associate with focus-marked elements. This does not occur in the corpus and three out of four consultants reject it. An example is shown in (15).

(15) **kị-mịmị-ɛ̀* ***xunyɔ́*** *má-ta* *(xé* *mó-ke)*
C_{4s}-rice-DEF **CTR3:FOC** 1s.SBJ-chew when 1s.SBJ.NEG-be.satisfied
Intended meaning: 'I ate [rice (*xunyɔ*)]$_{FOC}$ (but I'm still not satisfied).'
(elic-ctrpart2_130807_AB)

5.2.3 The particle *pɔ̀*

The contrastive particle *pɔ̀* occurs 74 times in the corpus. Its syntactic distribution is shown in Table 5.3 (for a comparison to the other two contrastive particles, see Table 5.5 in Section 5.2.5).

Table 5.3: The distribution of the contrastive particle *pɔ̀*.

Host	Count	Percentage
subject in-situ	39	53
left-dislocated NP	16	22
focused element	6	8
left-dislocated adjunct	4	5
verb	1	1
clause	8	11
total	*74*	*100*

Like the other two particles, it most frequently associates with sentence-initial elements, especially subjects, as in (16).

(16) From a narrative. 'Tortoise and vulture are friends. The vulture's house is up in a tree.'

ka-samla ***pɔ̀*** *ó-lí-prùdù*
C_{6s}-tortoise **CTR2** C_{1s}.SBJ.NEG-PROG.NEG-fly
'The tortoise (*pɔ̀*) does not fly.' (kadzidzi-turtle_110924_PKD)

Unlike the other particles, *pɔ̀* can associate with focus-marked elements. In these cases, *pɔ̀* is part of the focus-marked constituent and it carries the focus marker (extra high tone, see Chapter 3). An example can be seen in (17). There are six such cases in the corpus of spontaneous speech, and in elicitation consultants accept similar sentences without any problem.

(17) *xé* *sị̀* *be-di* *kò* *ka-tụ́kpa* ***pɔ́*** *ka-kpàsị́*
when COMP C_{1p}.SBJ-look just C_{6s}-male.goat **CTR2:FOC** C_{6s}.SBJ-be.in
ní *ò-gbe-no* *mè*
LOC C_{2s}-rope-DEF inside
'When they looked, it was [a male goat (*pɔ̀*)]$_{FOC}$ which was attached to the rope.' (kadzidzia_110406_QM)

Like *xunyɔ*, *pɔ̀* can occur in clause-final position. In most of these cases, the clause is a question. An example can be seen in (18).

(18) *lɛ̌* *a-kị́=yɛ* *kị́-bɔ̀-ɛ* ***pɔ̀***
then C_{1s}.SBJ-give=C_{1s}.OBJ C_{4s}-money-DEF **CTR2**
'And did he give him money (*pɔ̀*)?' (conv-ablorme_100715_SO-AS)

Among the three particles, *pɔ̀* is unique in occurring in immediately post-verbal position, when the verb is followed by a subordinate clause.[4] There is only one example in the corpus of spontaneous speech (19), but consultants have confirmed this as a correct Avatime sentence, and in elicitation, similar sentences have been accepted without any problem. Exactly what part of the sentence *pɔ̀* associates with semantically in these cases remains to be investigated. I will come back to this in Section 5.3.

[4] As the particle here occurs on the boundary between the matrix clause and the subordinate clause, this could be a special case of clause-final position. However, the particle *xunyɔ*, which frequently occurs in clause-final position, cannot occur between verb and subordinate clause (see Section 5.2.2, example (14)). This case is thus best treated as different from other cases of clause-final particles.

(19) Narrative about a dog that stole meat from a butcher and now wants to take meat from another dog it sees.

e-dze ***pɔ̀*** *sị̀* *kɛ* *kị-lí́* *yɛ* *ò-nugu-lo*
C_{1s}.SBJ-forget **CTR2** COMP C_{4s} C_{4s}.SBJ-be.at:LOC C_{1s} C_{2s}-mouth-DEF
mè=e *ye-bu=ke* *plɛ́* *ɔkɔ́kɔ*
inside=CM C_{1s}.LOG.SBJ-remove=C_{4s}.OBJ put:LOC somewhere
'But he forgot (pɔ̀) that that (meat) which is in his mouth, he should remove it and put it aside.' (dog_PA)

There is also a conjunction *pɔ̀* which can be translated as 'but' (see Section 2.8.2). An example can be seen in (20). The conjunction *pɔ̀* and the particle *pɔ̀* are clearly related, as both have a contrastive meaning. However, they should be analyzed as distinct lexical units, as the conjunction occurs in sentence-initial position whereas the contrastive particle occurs at the end of a constituent of the sentence or in sentence-final position.

(20) *bɛ̀ɛ́-kɔ̀* *kụ̀-da* *kí=yɛ* *sị̀* *ɔ-ŋwɛ̀*
C_{1p}.SBJ.PROG-take C_{5s}-drink give=C_{1s}.OBJ COMP C_{1s}.SBJ.SBJV-drink
pɔ̀ *ɔ́-lí-dìmɛ*
but C_{1s}.SBJ.NEG-PROG.NEG-accept
'They are giving him a drink to drink, but he is not accepting it.'
(famprob_110316_MM-AlA)

5.2.4 Contrastive pronouns

Two independent personal pronouns have a contrastive form in addition to their usual independent form. These are the first person singular and third person (noun class 1) singular pronouns. The regular independent forms of these pronouns are *mɛ* and *yɛ* respectively and their contrastive forms are *mɔ* and *yɔ*. Examples of the contrastive pronouns can be seen in (21) and (22). Looking at the form of these pronouns, it is likely that they are the result of a fusion of the independent pronoun and one of the contrastive particles.

(21) ***mɔ*** *má-tá-ba* *lo*
1s.CTR 1s.SBJ.NEG-INT-come FP
'Me, I won't come!' (chiefs-meeting_100619_03)

(22) ***yɔ,*** *ma-mɔ̀* *sị̀* *á-sɛ* *kóko* *tsyɛ* *de*
C_{1s}.CTR 1s.SBJ-see COMP C_{1s}.SBJ-leave already ADD FP
'As for her, I think she has left already.' (conv-rice_110411_3-3)

Synchronically, the first person singular regular independent pronoun *mɛ* never co-occurs with a contrastive particle, but the class 1 singular pronoun *yɛ* does so frequently (23). The contrastive pronouns can also co-occur with a contrastive particle, but that is quite rare (24).

(23) ***yɛ*** ***kɔ*** *ɔ́-fíní* *dɔ* *srasɛ̀*
C1s **CTR1** C1s.SBJ-lie.down land sleep
'As for him, he was lying down sleeping.' (FinSto_100517_AB)

(24) *pɔ̀* ***yɔ*** ***kɔ*** *ɔ́-pɛ* *sị̀*
but **C1s.CTR** **CTR1** C1s.SBJ.NEG-want COMP
yi-pè
C1s.LOG.SBJ.SBJV-be.tired
'But as for her, she does not want to get tired.'
(conv-greenhouse_110408_SO-ViA_2)

There are 56 occurrences of contrastive pronouns not modified by other contrastive particles in the corpus, 48 of which refer to subjects. The other 8 are object pronouns, which are all left dislocated. An example can be seen in line 2 of (25).

(25) 1 A: *mlɔ* *tiabà* *tsyɛ* *bɛ-kị=mlɔ* *ku-plikpá* *lɔ̀*
2p C1p.two ADD C1p.SBJ-give=2p.OBJ C6p-letter DIST
'You two, did they also give you those letters?'
2 B: *o* ***mɔ*** *bá-kị=mɛ* *ke-plikpe-à*
oh **1s.CTR** C1p.SBJ.NEG-give=1s.OBJ C6s-letter-DEF
'Oh, as for me, they didn't give me a letter.'
(chiefs-meeting_100619_03)

5.2.5 Summary

In this section, I have discussed the syntactic properties of three contrastive particles. I also mentioned two contrastive pronouns, which probably arose from the fusion of the regular independent pronouns and a contrastive particle. Table 5.4 shows the total numbers of the different contrast markers encountered in the corpus.

Table 5.5 compares the distribution of the three contrastive particles. Example (26) shows a simplified version of the constituent order of Avatime sentences as presented in Section 2.7.1, in order to understand the relative positions of the various hosts for the particles.

Table 5.4: Contrast markers: total count

marker	frequency
kɔ	140
pɔ̀	74
xunyɔ	60
ctr. pronoun	56

Table 5.5: The distribution of elements (hosts) marked with the three contrastive particles over different positions in the sentence.

	distribution (%)		
host	*kɔ*	*xunyɔ*	*pɔ̀*
subject in-situ	47	43	53
left-dislocated NP	29	29	22
left-dislocated adjunct	21	3	5
focused element	0	0	8
postverbal adjunct	1	0	0
postverbal NP	1	1	0
verb	0	0	1
clause	0	24	11
total	*100*	*100*	*100*

(26) Constituent order of monoverbal Avatime sentences:
LD elements - focus - subject - verb - object - adjuncts

The contrastive particles are similar in the sense that they associate most frequently with preverbal elements, which are usually in sentence-initial position. I will come back to this and try to account for it in Section 5.4.1. The most frequently contrast-marked elements are the subject of the sentence and left-dislocated noun phrases. The contrastive particles rarely associate with postverbal adjuncts and NPs. An interesting difference between the particles is that *kɔ* associates with preverbal adjuncts much more frequently than *xunyɔ* and *pɔ̀*. *Xunyɔ* and *pɔ̀*, on the other hand, regularly associate with clauses, which *kɔ* never does. The particle *pɔ̀*, unlike the other particles, can occur immediately after the verb, when the verb is followed by a subordinate clause. *Pɔ̀* can also associate with focus-marked elements, which is judged ungrammatical for the other two particles.

In addition to this, the particles *kɔ* and *pɔ̀* are identical in form to the clause connectors *kɔ* 'then' and *pɔ̀* 'but'. In the case of *pɔ̀*, the particle and

connector are clearly different but related lexical units: both have a contrastive interpretation but they have different grammatical functions in the sentence. The particle and connector *kɔ* are likely related too.

5.3 Meaning

In this section, I look into the meaning of the contrastive particles. This investigation is based on a subset of my corpus of spontaneous speech. For this subset, I selected all instances of the particles occurring in narratives. This includes both traditional narratives and 'elicited' narratives (narrations of the frog story and the pear film, see also Section 1.4). The reason for choosing only narratives is that the common ground in narratives is relatively well controlled. The narrator will tell the story in such a way that anybody will be able to follow it (knowing that she is being recorded) and will not rely on privately shared knowledge between her and the addressee(s). In other genres of discourse, privately shared knowledge between interlocutors plays a larger role, making it more difficult to identify what the contrast-marked element is contrasted to.[5] The corpus of narratives contains 94 occurrences of the particles *kɔ*, *pɔ̀* and *xunyɔ* and the contrastive pronouns.

Before I go into the meaning of the Avatime particles, I briefly discuss the notion of contrast as described in the literature, in Section 5.3.1. In this section, I point out that contrast has been defined in a broad and a narrow sense. In Section 5.3.2 I show that the Avatime contrastive particles can best be accounted for if contrast is defined in a narrow sense. In Section 5.3.3 I propose the following basic meaning for the contrastive particles: the contrastive particles indicate that a proposition or predicate that is relevant in the context does not apply to the situation currently described. In Section 5.3.4 I discuss some cases that seem to form exceptions to the proposed meaning and in Section 5.3.5 I summarize my findings.

5.3.1 Contrast

As I mentioned in Section 1.2.3, literature on contrast often makes a clear distinction between the concepts contrastive topic and contrastive focus (see e.g. Repp, 2010). The notion of contrastive focus has been discussed in Chapter 3 and does not seem relevant for the contrastive particles discussed here.

[5]Of course, studying only narratives means that the particles are not investigated in every possible context in which they can occur. There might be some common usages of the particles that I miss by restricting myself to narratives. The present work should therefore be seen as an initial exploration and the use of contrastive particles in other genres of discourse will remain a topic for future research.

The notion of contrastive topic does seem to be related to the Avatime contrastive particles, so I will elaborate on this notion here. Some authors simply use the term contrast for what others call contrastive topic. In this literature overview, I will use the term contrastive topic wherever the original authors have used this term. In my description of the Avatime particles, I will talk about contrast. In Section 5.4.1 I will argue that the Avatime contrastive particles are better accounted for without using the notion of topic.

Research on contrastive topics has mostly focused on the so-called fall-rise pitch accent found in English, German and related languages. An example of a sentence with contrastive topics marked in this way is line 2 of (27). Capital letters in this example indicate pitch accents. *Sister* and *brother* carry the fall-rise pitch accents marking them as contrastive topics, whereas *medicine* and *freight ship* carry focus accents.

(27) 1 A: *What do your siblings do?*

2 B: *My SISter studies MEDicine and my BROther is working on a FREIGHT ship.* (Krifka 2007, 44)

Contrastive topics have been defined in a broad and a narrow sense. In the broad sense, the function of contrastive topic marking is to indicate the presence of contextually relevant alternatives to the topic. Krifka (1999, 113) phrases this as follows: "Contrastive topics are topics - they refer to something about which information is required. But they are also contrastive, that is, they come with alternatives - there are other things about which information is required." Büring (2003) uses a similar definition and so do Vallduví & Vilkuna (1998, 87), who describe contrastive topics as introducing "a set M = {...,a,...}" with the interpretive effect that "if property P holds of **a**, then other properties P' hold of the other members of M." Vallduví & Vilkuna give as examples of contrastive topic marking not only the fall-rise pitch accent, but also the syntactic topicalization construction as in (28).

(28) *Beer I like (but whisky I hate)* (Vallduví & Vilkuna, 1998, 87)

Vallduví & Vilkuna do not mention what kind of relation should hold between the properties P and P'. Krifka also does not impose constraints on what is said about the alternative topics. Büring (2003) mentions that contrastive topics usually come with the interpretation that different things are claimed of the contrasted topic and its alternative. He gives (29) as an example, which will normally be interpreted as indicating that other people ate other things than beans. However, he does not analyze this interpretation as part of the encoded meaning of the construction, but rather as a (cancelable)

conversational implicature. That this is indeed cancelable is shown by the fact that (29) can plausibly be continued with *but I don't know what the others ate* or *and maybe Mary ate beans, too*.

(29) *FRED ate the BEANS* (Büring, 2003, 511)

When contrast is defined in a narrow sense, it is defined as evoking alternatives and in addition indicating that there is an opposition between the contrasted element and its alternative. Prince (1998, 290-291) in discussing topicalization, writes that "contrast is not a primitive notion but rather arises when alternate members of some salient set are evoked and, most importantly, when there is felt to be a salient opposition in what is predicated of them". Repp (2010) also notes that contrasted elements are somehow different or opposite. However, what it means for two elements or predicates to be opposite is not made clear in either account.

Two accounts that are clearer about the meaning of oppositeness are Taglicht (1984) and Myhill & Xing (1996). Taglicht (1984) notes that oppositeness may be part of the semantic structure of the two opposite terms (as in 'good' and 'bad'), but it may also be context-dependent (for instance, green and red are opposites in the context of traffic lights). Myhill & Xing (1996) provide a more detailed account. They suggest 5 ways in which an opposition can come about: (i) a pair of a verb and the same verb negated, (ii) one verb expressing doing an action and the other not doing it, (iii) one verb expressing a positive interpersonal relation and the other a negative one, (iv) verbs expressing opposite directions and (v) having a second pair of set members in the contrasted utterances while the verbs have the same meaning. Example (28) above would thus be contrastive on the grounds that the two clauses contain a pair of members from a set (beer and whisky) and their verbs are opposite by virtue of expressing positive versus negative interpersonal relations. Myhill & Xing's (1996) main interest is in developing a notion of contrast that can be applied crosslinguistically to naturally occurring data, and in that they have succeeded. At the same time, as they admit, their criteria are rather ad-hoc and lack an overaching, more abstract, definition of opposition.

In the remainder of this section I will explore how the meaning of the Avatime contrastive particles fits in with the notion of contrast or contrastive topic as described in the literature and I will try to refine the notion of contrast based on the Avatime data.

5.3.2 Contrast marking in the narrow sense

The Avatime contrastive particles mark contrast in the narrow sense, i.e. there is not only an alternative to the contrast-marked element, but there is also an opposition in the remainder of the sentence. Example (30), repeated from (1), illustrates this. Here, the marked element is *tìle* 'one', referring to one basket. Its alternative is *kụ̀sɔ̀ɔ̀ tụ̀bà* 'two baskets'. These clearly form a set. It is also obvious that what is predicated of the two set members is opposite, as the second clause contains the same verb as the first but negated.

(30) Previously, the narrator has mentioned that there are three baskets and two are full. A bit further on in the narrative, one of the listeners asks for confirmation that two baskets are full. The narrator responds.

1	*kụ̀-sɔ̀ɔ̀-ɔ̀*	*tụ̀-bà*	*kì-yi*	
	C_{6p}-basket-DEF	C_{6p}-two	C_{6p}.SBJ-full	
	'Two baskets are full.'			
2	*pɔ̀* *tì-le*	***xunyɔ***	*ká-yi*	*sukɔ̀*
	but C_{6s}-one	**CTR3**	C_{6s}.SBJ.NEG-full	yet
	'But one (*xunyɔ*) is not yet full.'			(pear_100517_MM-BK-FK)

In 75 out of the 94 cases of contrastive particles found in the corpus of narratives, an opposition can clearly be identified (the exceptions will be discussed in Section 5.3.4). This seems to be a strong argument in favor of defining the particles as expressing a narrow notion of contrast rather than a broad notion in which contrast only indicates that there is an alternative. However, Büring (2003) argues that the interpretation of an opposition between predicates may arise as an implicature within a broad notion of contrast. This is how he analyzes German contrastive topics. If the same thing was going to be said about two topics, a simpler construction would normally be used which conjoins the two topics within a single noun phrase. If such a construction is not used, we can infer that something different is said about the other topic. This account does not work for the Avatime particles for three reasons.

First, there are cases of contrast marking in which there is an opposition, but this opposition is not made with respect to a marked constituent ('contrastive topic') and its alternative. This is the case when the particles *xunyɔ* and *pɔ̀* are used sentence-finally, as in (31). In this example, after line 1, the listener may expect that the boy will stop to pick up the pears that fell. In line 2, the speaker indicates that the boy did not pick them up and marks this with the particle *xunyɔ*.

(31) A boy was riding his bicycle with a basket full of pears on the front.

1 *bí-tɔ* *bìĺ-wɔlì*
C_{4p}-INDF C_{4p}.SBJ.PROG-fall
'Some were falling.'

2 *ɔ́-lí-ta = bɛ* *kpɛ* ***xunyɔ***
C_{1s}.SBJ.NEG-PROG.NEG-pick = C_{4p}.OBJ put.in **CTR3**
'But he did not pick them up.' (pear_100709_MiA-DQ)

The opposition between the boy picking up the pears and the boy not picking up the pears is made with respect to what one might expect and what actually happened. The contrastive particle associates with the part of the sentence that encodes the opposition itself and not with a constituent of the sentence with respect to which the opposition is made. This means that the type of inference proposed by Büring cannot account for the interpretation of the sentence as opposite to an expectation.

Second, when the particle does associate with a constituent of the sentence for which there is an alternative, this alternative does not have to be mentioned in the discourse context. This is problematic if evoking alternatives is the only function of the particles, because there are very often unmentioned alternatives to elements of the discourse. If the particles can evoke unmentioned alternatives, it is difficult to define when they cannot be used, as there are always alternatives to elements that are expressed. If the primary meaning of the particles is to express an opposition, it is fine if the alternative is not overtly mentioned, as long as the opposition is clear. An example that illustrates this is (32). Here, the alternative to 'that time' is not mentioned anywhere in the preceding discourse. It can be inferred from the opposition, i.e. Ghana being called Gold Coast versus Ghana being called Ghana. Because it is common knowledge that Ghana is called Ghana at the present time, the alternative to 'that time' must be the present time. Rather than an opposition being inferred from evoking alternatives as in Büring's account, the alternative is inferred from the opposition.

(32) From a story about the past travels of the Avatime people.

lì-pó *lɛ́-lɔ̀* ***kɔ*** *gol* *cosí* *ghana* *e-ze*
C_{3s}-time C_{3s}-DIST **CTR1** gold coast:FOC Ghana C_{1s}.SBJ-be.PST
'At that time, Ghana was (called) [Gold Coast]$_{FOC}$.'
(Avatime-history_BB_20110905)

A final reason why the broad notion of contrast is not adequate for the description of the Avatime particles is that it is too broad. The Avatime contrastive particles are not the only linguistic markers in Avatime that can

evoke alternatives. The broad notion of contrast would include, for instance, the additive particle *tsyɛ* which will be discussed in Chapter 6. To differentiate between the contrastive particles and the additive particles, and possibly other linguistic markers, their definitions have to be more specific than merely 'evoking alternatives'.

In summary, the broad notion of contrast cannot account for all cases in which the contrastive particles are used and does not exclude other linguistic markers. The Avatime contrastive particles are better described using a narrow definition of contrast that includes the notion of opposition. So far, I have used a rather intuitive notion of opposition. In the next section, I explore how the narrow notion of contrast can be defined more precisely.

5.3.3 Defining opposition

In example (30) in the previous section, there is a clear opposition between being full and not being full. Based on this example, opposition could be defined in terms of negation. However, it is not always the case that what is said in one sentence of a pair of opposites literally negates what is said in the other. This is shown in (33), where there is an opposition between flying and walking. Flying is not the negation of walking. What causes the opposition is that flying and walking belong to a set of related activities, i.e. manners of motion. When one member of this set is selected, another cannot be true at the same time.

(33) Previous context: 'There were once two good friends. One is a bird.'

1 *o-nu* *o-pete,* *í-zě-prùdù*
C_{1s}.SBJ-be C_{1s}-vulture C_{1s}.SBJ-HAB-fly
'He is a vulture, he flies.'

2 *to-le* *o-nu* *ka-samla* *ní* *ke-se-à,* *yɛ* ***kɔ***
C_{1s}-one C_{1s}.SBJ-be C_{6s}-tortoise LOC C_{6s}-ground-DEF, C_{1s} **CTR1**
í-zɛ̌-gà
C_{1s}.SBJ-HAB-walk
'One is a tortoise on the ground, as for him, he walks.'
(kadzidzi-turtle_PKD_20110924-1)

The shared core meaning that I propose for the Avatime contrastive particles is presented in (34).[6]

[6] In the corpus study described here, I did not find differences in meaning or function between the three particles. Because of this, I propose a shared core meaning for the particles. Future research may find meaning differences. I come back to this in Section 5.4.2.

(34) a. Previous context or knowledge makes X relevant.

b. With respect to the current situation, X is not the case, Y is the case.

X and Y are predicates or propositions and are members of a set. It can be the case that Y is the negation of X and the set consists of X and Y only (i.e. being full and not being full). The set may also consist of related predicates or propositions that mutually exclude each other (i.e. flying and walking).

This meaning accounts for example (33) as follows. The previous context makes 'normally flying' relevant, as this has been stated about the vulture, who is an alternative to the contrast-marked element, the tortoise. With respect to the current situation, which is about the tortoise, 'normally flying' is not the case, the tortoise normally walks.

The opposition is not always literally present in the discourse. In some cases, the opposition needs to be inferred. An example can be seen in (35). Telling somebody to leave a person and remembering how a person helped you are not members of a set. However, from the fact that the man is remembering how the woman helped him, the listener can infer that he does not want to leave her. Now there is an opposition between wanting the man to leave the woman and the man not wanting to leave her.

(35) 1 *lɛ̌ e-kpese kʊ̀-da ŋwɛ lɛ̌ ya-vià*
and C_{1s}.SBJ-start C_{5s}-drink drink and C_{1s}.POSS:C_{1p}-friend-DEF
bɛ-sɪ̀=yɛ sɪ̀ ɔ́-yrɔ ɔ́-dzɛ́ lɔ̀
C_{1p}.SBJ-tell=C_{1s}.OBJ COMP C_{1s}.SBJ.SBJV-leave C_{1s}-woman DIST
'And he started to drink and his friends told him that he should leave that woman.'

2 *yɛ* ***pɔ̀*** *ɛ̀ɛ́-mɔ̀ kɪ́lɛ gì ɔ́-dzɛ a-pɔnɪ̀*
C_{1s} **CTR2** C_{1s}.SBJ.PROG-see how REL C_{1s}-woman C_{1s}.SBJ-help
yɛ wá zanɔ̀=ɛ
C_{1s} ? past=CM
'As for him, he is remembering how the woman helped him in the past.' (famprob_110401_MeD-BeK_story)

As mentioned in Section 5.2.3, the particle *pɔ̀* can associate with a focus-marked element. There are two such cases in the corpus of narratives.[7] One of them can be seen in (36), repeated from (17). This case also fits within the account presented in (34). Here, the listener knows from the context that *Atrodze* is not tied to the rope anymore. The contrast marking indicates that this is not the case for the goat, he *is* tied to the rope.

[7] These two cases are related, in the sense that they occur close together in the same story and refer to almost the same situation.

(36) The lead character of the narrative, Atrodze, caused an old man to die and because of that the man's family tied him to a very long rope and planned to kill him for the old man's funeral. However, Atrodze managed to escape and tied a male goat to the rope instead. When the day of the funeral arrived, the man's family pulled the rope in.

xé *sị̀* *be-di* *kò* *ka-tụ́kpa* ***pɔ́*** *ka-kpàsị́*
when COMP C_{1p}.SBJ-look just C_{6s}-male.goat **CTR2:FOC** C_{6s}.SBJ-be.in
ní *ò-gbe-no* *mè*
LOC C_{2s}-rope-DEF inside
'When they looked, it was a male goat who was attached to the rope.'
(kadzidzia_110406_QM)

The first part of the meaning for the contrastive particles, presented in (34a), states that the proposition or predicate X is 'relevant'. In the examples I have shown so far, what makes X relevant is that it is the case for an alternative to the contrast-marked element. When the contrastive particle occurs in sentence-final position, as was shown in Section 5.3.2, there is no set of elements with respect to which the opposition is made. Instead, the entire sentence encodes the opposition. In this case, what makes X relevant is that it can be expected based on the previous context or that it is an implicit assumption. This is the case in (31), repeated here as (37). Here, the boy picking up the pears is relevant, because the listener might expect this to happen after some pears fell. The contrast marking indicates that in the current situation of the story, this is not the case, the boy did not pick up the pears.

(37) A boy was riding his bicycle with a basket full of pears on the front.

1 *bí-tɔ* *bìĺ-wɔlì*
C_{4p}-INDF C_{4p}.SBJ.PROG-fall
'Some were falling.'

2 *ɔ́-lí-ta=bɛ* *kpɛ* ***xunyɔ***
C_{1s}.SBJ.NEG-PROG.NEG-pick=C_{4p}.OBJ put.in **CTR3**
'But he did not pick them up.' (pear_100709_MiA-DQ)

Another example of opposition to an expectation, this time marked with sentence-final *pɔ̀*, is shown in (38).[8] In this case, speaker A asks a question to which she expects a negative answer. The content of the question (the child moves) is in opposition with the expectation of the speaker (the child

[8]This example does not come from the corpus of narratives. The corpus of narratives does not include cases of sentence-final *pɔ̀*. To verify that sentence-final *pɔ̀* conforms to the definition discussed here, examples were taken from the broad corpus.

does not move). This is explicitly revealed in line 5, where she shares her observation that the child is always sitting down quietly.

(38) 1 A: *wo-bí* *lɛ́yà* *tsyɛ* *ì-zɛ̌-hwa-nì* *ịsu*
2s.POSS:C_{1s}-child C_{1s}.PROX ADD C_{1s}.SBJ-HAB-move-COM body
koŋ ***pɔ̀***
at.all **CTR2**
'This child of yours, does she move her body at all?'

2 B: *ɔ-wɔlì*
C_{1s}-which
'Which one?'

3 A: *iliyɛ* *gì* *o-dí* *yá* *te*
this.one REL C_{1s}.SBJ-sit here like.this
'The one sitting here.'

(...)

4 B: *ɨ-zɛ̌-hwa-nì*
C_{1s}.SBJ-HAB-move-COM
'She moves.'

(...)

5 A: *li-poe* *káka* *kò* *o-di* *kpoŋ*
C_{3s}-time every only C_{1s}.SBJ-sit quietly
'She is always sitting down quietly.' (conv-street_100720_1)

The definition I presented is thus not dependent on the type of element that the contrastive particles associate with: it accounts for the use of the particles with non-focused constituents, their use with focus-marked constituents and for the sentence-final use of the particles. In the next section, I discuss a number of cases that seem to constitute exceptions to the meaning I proposed.

5.3.4 Other cases

This section discusses cases of contrastive particles which do not conform to the meaning proposed in (34). There are 7 cases in which the syntactic and semantic scope of the particles do not match. There are 10 cases in which there does not seem to be an opposition and there are 9 cases in which it is not clear at all why the particles are used.

In 7 cases, the contrastive particles associate with an element of the proposition, but have an interpretation similar to that of sentence-final particles. There is no alternative to the contrast-marked element and the entire

sentence encodes the opposition. One of these cases can be seen in (39). Here, the particle *xunyɔ* associates with 'the man', but there does not seem to be an opposition between something that holds true for the man and something that holds true for an alternative to the man. Instead, speaker A makes the proposition 'the man was not there' relevant and speaker B indicates that in the current situation of the story, this proposition is not the case, the man was there, picking fruit.[9]

(39) A man has climbed into a tree and is picking pears. At the foot of the tree, there are some baskets filled with the pears he has picked already. A boy comes by and steals one of the baskets. At this point, one of the listeners to the story interrupts, wondering how it can be that the man did not notice this.

1 A: *ɔ́-niyɛ̀* *ɔ́-má* *lɔ̀*
C_{1s}-person.PROX C_{1s}.SBJ.NEG-be.NEG there
'Was that person not there?'

2 B: *ɔ-kà-ɛ* *ɔ-kpàsí* *ò-se-lo* *mè,* *yɛ* ***xunyɔ***
C_{1s}-father-DEF C_{1s}.SBJ-be.in:LOC C_{2s}-tree-DEF inside C_{1s} **CTR3**
yɛ *bị-déyà* *kó* *èɛ́-gụ*
C_{1s} C_{4p}-thing:PROX only:FOC C_{1s}.SBJ.PROG-pick
'The man was in the tree, as for him, he was only picking his things.' (pear_100517_MM-BK-FK)

These 7 cases include the one case in which the contrastive particle directly follows the verb (see Section 5.2.3). This can be seen in (40), repeated from (19). Here, the contrastive particle points out that the listener might expect the dog to put its meat aside before trying to steal more, but this is not the case. Again, even though the particle seems to associate with a part of the sentence, the entire sentence is interpreted as in opposition to an expectation.

(40) Narrative about a dog that stole meat from a butcher and now wants to take meat from another dog it sees.

e-dze ***pɔ̀*** *sị̀* *kɛ* *kị-lí́* *yɛ* *ò-nugu-lo*
C_{1s}.SBJ-forget **CTR2** COMP C_{4s} C_{4s}.SBJ-be.at:LOC C_{1s} C_{2s}-mouth-DEF
mè=e *ye-bu=ke* *plɛ́* *ɔkɔ́kɔ*
inside=CM C_{1s}.LOG.SBJ-remove=C_{4s}.OBJ put:LOC somewhere
'But he forgot that that (meat) which is in his mouth, he should remove it and put it aside.' (dog_PA)

[9]This seems to be the most likely explanation for the use of the particle here. However, it is conceivable that the particle does evoke an alternative to the man: the boy, which was mentioned further back. The opposition could then be between the boy stealing and the man picking his own pears, i.e. not stealing.

These cases of mismatch between the syntactic position of the particle and its semantic interpretation do not constitute exceptions to the proposed meaning itself. However, they do form exceptions to the generalization that whenever the particle associates with a constituent of the sentence, an alternative to this constituent is evoked.

There are 10 cases of contrastive particles in which there does not seem to be an opposition. In these cases it seems that all the particles do is evoking alternatives, which would be in accordance with the broad definition of contrast as described in Section 5.3.1. However, it is also possible that several or all of these cases involve an opposition which cannot be detected from the discourse context alone. An example of this is (41). Here, the cat, the horse and the sheep occur in a parallel construction, with contrastive particles marking the horse (line 2) and the sheep (line 3).

(41) From a story about a chief who had various animals. The three animals he liked best were the sheep, the horse and the cat. Why was that?

1 *adzramɔ-ɛ yɛ ì-suya ì-dra tsịnị tsịnị tsịnị tsịnị*
cat-DEF C_{1s} C_{2p}-body C_{2p}.SBJ-be.clean ID ID ID ID
ɔ́-dị̀mɛnì si-mlumlu
C_{1s}.SBJ.NEG-like C_7-dirt
'The cat, its body is always very clean, it doesn't like dirt.'

2 *isɔ-ɛ* ***pɔ̀=ɛ*** *yɛ́ o-nu ŋwaa sì yɛ*
horse-DEF **CTR2=CM** C_{1s}:FOC C_{1s}.SBJ-be like COMP C_{1s}
ò-hui-lò gì í-zɛ̌-kɔ ɛ-tsịnɔ̀ ɔ̀-kɔ káka
C_{2s}-vehicle-DEF REL C_{2s}.SBJ-HAB-take SVM-send C_{2s}-corner every
lósò a-dìmɛnì fáin
so C_{1s}.SBJ-like fine
'As for the horse, that is like his vehicle which takes him everywhere, so he likes it very much.'

3 *ò-besi-lò* ***pɔ̀=ɛ*** *o-nu ɔ-gà gì è-hwa*
C_2-sheep-DEF **CTR2=CM** C_2-be C_{1s}-animal REL C_{2s}.SBJ-be.white
pitititi lóso í-zɛ̌-kpɛ=yɛ ì-samì ní
ID so C_{2s}.SBJ-HAB-put.in=C_{1s}.OBJ C_{2p}-happiness LOC
ke-pe-a mɛ̀
C_{6s}-house inside
'As for the sheep, it is an animal which is very white, so it makes him happy in the house.' (kadzidzi-chiefsson_PKD_20110924-2)

If this example followed my definition, being clean, being white and being used as a vehicle should form a set, the members of which are mutually exclusive. This is not the case: it is possible to be clean, white and a vehicle at

the same time. However, this example can be accounted for if one assumption is made: the chief likes each of his animals for one main reason. In that case, liking an animal for being clean, liking it for being white and liking it for its usefulness as a vehicle do mutually exclude each other. This is a reasonable assumption, which is perhaps even forced on the listener by the use of the particle *pɔ̀* itself. Nevertheless, because I want to base my investigation on the observable discourse context only, I classify this example and similar examples as exceptions. It is important to keep in mind though, that this does not mean they do not fit in with my analysis.

Finally, there are 9 cases in which it is not clear at all why the contrastive particles are used, as there seems to be neither an alternative to the contrast-marked element nor an opposition. An example is (42).

(42) The tortoise asked his friend the vulture to deliver a parcel for him. Without the vulture's knowledge, the tortoise entered the parcel. The vulture looked around for the tortoise but could not find him, so he decided to go and deliver the parcel.

1 *o-pete tsyɛ ku-susu-yò kú-si yɛ sị̀ le*
C_{1s}-vulture ADD C_{5s}-thought-DEF C_{5s}.SBJ-? C_{1s} COMP ?
o-dí ò-gùdò-lo mè sị̀ le ka-samla 'a-kpàsị̀
C_{1s}.SBJ-look C_{2s}-box-DEF inside COMP ? C_{6s}-tortoise C_{6s}.SBJ-be.in
àló ɔ́-ma na
or C_{1s}.SBJ.NEG-be.NEG Q
'The vulture did not think to look inside the box whether the tortoise was in there or not.'

2 *ko xé yɛ **kɔ** á-kɔ lị̀-dɔ̀tu-lè xé á-kɔ*
just when C_{1s} **CTR1** C_{1s}.SBJ-take C_{3s}-load-DEF when C_{1s}.SBJ-take
a-nya = ɛ
SVM-tie = CM
'Then he (*kɔ*) took the parcel and tied it.'

(kadzidzi-turtle_PKD_20110924-1)

Some of these cases might on closer inspection turn out to encode an opposition. After all, the speakers' intentions are not directly accessible to me. Other cases might turn out to be production errors. It could also be the case that some of these examples reveal further usages of the contrastive particles that I have not identified. Further consultation with native speakers and studying a larger selection of data should shed light on these cases.

5.3.5 Summary

In this section, I have shown that the Avatime contrastive particles indicate contrast as defined in the narrow sense. The broad definition of contrast, which defines it as evoking alternatives, does not adequately account for the usages of the contrastive particles. The shared core meaning that I propose for the contrastive particles can be seen in (43), repeated from (34). In this definition, X and Y are predicates or propositions and are members of a set.

(43) a. Previous context or knowledge makes X relevant.

b. With respect to the current situation, X is not the case, Y is the case.

The first part of this definition mentions X being made relevant. X can become relevant in two different ways. First, it can be relevant because it holds for an alternative to the contrast-marked element. In those cases, X is the case with respect to the alternative and X is not the case (but Y is the case) with respect to the contrast-marked element. This is the interpretation that arises most of the time when the contrastive particles associate with an element of the proposition. The second way in which X can be relevant is because it is expected or assumed, or the speaker assumes the addressee expects it. In these cases, the contrast-marked sentence indicates that the expectation or assumption is incorrect. This is the interpretation that arises when the contrastive particles occur in sentence-final position. This interpretation may also arise when the contrastive particles associate with an element of the proposition, but this is rare.

Out of the 94 cases of contrastive particles, there are 19 cases for which the definition proposed does not seem to hold. In 10 of these, the definition may be applicable if further assumptions are made. In 9 cases, it is at present unclear why the contrastive particles are being used.

5.4 Discussion

In this section I discuss two remaining issues: (i) whether or not the notion topic is explanatory in accounting for the meaning of the contrastive particles, and (ii) whether there are any differences in meaning between the three contrastive particles.

5.4.1 Topic

In the literature, the label contrastive topic has often been used for constructions with meanings similar to that of the Avatime contrastive particles (see

Section 5.3.1). Here, I argue that the notion topic is not necessary to account for the meaning of the Avatime particles.

Sentence topics are usually defined as 'what the sentence is about' (see also Section 1.2.2). In most frameworks, topics are expressions denoting referents, although some authors include adverbials as well (Klein, 2008). Two out of the three Avatime contrastive particles clearly do not only mark topics: *xunyɔ* and *pɔ̀* can occur sentence-finally and *pɔ̀* can associate with a focus-marked element. These particles are better accounted for with a definition that does not use the term topic. The particle *kɔ* is different from the other two particles in that it could be argued to mark topics: it associates only with elements of the sentence that are not focused and these are almost always subjects or left-dislocated elements. This does require a broad notion of topic that includes adverbials, as *kɔ* frequently associates with adverbials.

Intuitively, when the contrastive particles associate with a constituent of the sentence (i.e. when they do not occur in sentence-final position), this constituent often seems to be 'what the sentence is about'. This intuition comes about because the contrast marking splits the sentence into two parts: (i) the contrasted element to which an alternative is evoked, and (ii) a part which specifies something with respect to this element that is in opposition to something known about the alternative. This makes the contrasted element the element about which information is provided. The part of the sentence that expresses the opposition likely contains the main information update, as it denies previously known information. This means that it is in focus (see Chapter 3). If the opposition is in focus, the contrast-marked element itself is not in focus and is thus easily interpreted as the sentence topic. The interpretation of the contrated element as a topic is thus a consequence of the meaning of contrast.

That the occurrence of the particles with topic-like elements is a tendency and not a rule is illustrated by the fact that *pɔ̀* can occur with focus-marked elements. These cases are rare and require a specific context that allows the opposition to be not focused. This is shown in example (44), repeated from (17). Here, *katukpa* 'the male goat' is marked for both focus and contrast. The contrast-marking indicates that there is an alternative to the goat, *Atrodze*, for which it is not the case that he is tied to the rope (see also Section 5.3.3). The part of the sentence that indicates the opposition, being attached to the rope, is not in focus. This is the case because for the family in the story, the most informative part of the sentence is not that something is tied to the rope (this is presupposed), but that the one tied to the rope is a goat instead of *Atrodze*. In this case, there are two perspectives that play a role: that of the listener to the story, who knows that the goat is tied to the rope instead

of *Atrodze*, and that of the story characters to whom the discovery that the goat is tied to the rope comes as a surprise.

(44) The lead character of the narrative, Atrodze, caused an old man to die and because of that the man's family tied him to a very long rope and planned to kill him for the old man's funeral. However, Atrodze managed to escape and tied a male goat to the rope instead. When the day of the funeral arrived, the man's family pulled the rope in.

xé *sị̀* *be-di* *kò* *ka-tụ́kpa* ***pɔ́*** *ka-kpàsị̀*
when COMP C_{1p}.SBJ-look just C_{6s}-male.goat **CTR2:FOC** C_{6s}.SBJ-be.in
ní *ò-gbe-no* *mè*
LOC C_{2s}-rope-DEF inside
'When they looked, it was a male goat who was attached to the rope.'
(kadzidzia_110406_QM)

The property of the particles to split the sentence into two parts also explains why contrast-marked elements occur so frequently in sentence-initial position: syntactic separation of the two parts makes this split clearer. As the particle occurs at the end of the contrasted constituent, sentence-initial position of this constituent ensures a correct interpretation of what the particle associates with. Also, as I showed in Chapter 4, left dislocation is used to highlight a background element that is important to keep in mind for processing of the upcoming discourse. Contrast-marked elements are often left dislocated to give the addressee the opportunity to identify the relevant alternative so that she can properly integrate the remainder of the sentence with previous knowledge.

5.4.2 Differences between the particles

In Section 5.2, I showed that there are similarities and differences between the syntactic contexts in which the particles occur. They are similar in the sense that they all most frequently occur with subjects and, after that, left-dislocated elements. The differences are that (i) *kɔ* associates frequently with initial adjuncts, whereas the other particles do so less frequently; (ii) *pɔ́* and *xuŋyɔ* can occur sentence-finally, whereas *kɔ* cannot; and (iii) *pɔ́* can occur with focus-marked elements and immediately following the verb, whereas the other two particles cannot.

As I pointed out in Section 5.3, when the particles are used sentence-finally, their meaning is slightly different from when they associate with a constituent of the sentence. When they associate with a constituent of sentence, they indicate that there is an alternative to this constituent and there is an opposition with respect to the two alternatives. When the particles

occur sentence-finally, they mark an opposition with respect to an expectation or assumption. As *pɔ̀* and *xunyɔ* can occur clause-finally and *kɔ* cannot, there may thus be a slight meaning difference between them. However, this difference in meaning can be derived from the position of the particle and therefore it does not seem necessary to specify it in the meaning of the particles.

When the particles associate with sentence-initial constituents that are not marked for focus, there are no clear differences in meaning between them. In sentence-initial position, my consultants were always happy to substitute one of the particles for any other. There is some evidence that replacing *xunyɔ* or *kɔ* with *pɔ̀* results in a slight change in meaning. This is reported by some consultants, although they cannot explain what this difference is. Another indication is that the consultants did not tend to come up with *pɔ̀* as a replacement for *xunyɔ* and *kɔ*, whereas they sometimes spontaneously suggested *xunyɔ* and *kɔ* as alternatives for each other in elicitation. No difference in meaning were reported between the latter two particles when they occur with sentence-initial constituents. When asked about these particles, some consultants express a consistent preference for one or the other, which is an indication that their meanings are similar enough not to need both. One consultant, during the transcription of another speaker's speech, even transcribed every encountered non-final *xunyɔ* as *kɔ* without any comments. In the data I collected, I did not see a pattern in speaker preferences that would suggest a division in use based on age, gender or dialect. However, as my research was not intended to be sociolinguistic in nature, further research into sociolinguistic factors that might influence the use of these particles is needed.

Another direction in which one could look to find differences between the particles is to study different genres of discourse. For the current study, I restricted the data to narratives. Perhaps when language use in more interactive settings is taken into account, functional differences between the particles will emerge.

5.5 Summary

In this chapter, I have discussed the syntactic properties and the meaning of three contrastive particles and two contrastive pronouns. I have shown that there are some differences in the syntactic distribution of these elements, but all most frequently mark sentence-initial constituents, especially subjects and left-dislocated elements. Two of the particles can also be used clause-finally and one of these can be used with focus-marked elements.

I studied the use of the particles and pronouns in narratives to find out their meanings. I argued that a broad notion of contrast does not adequately account for the use of the particles. The particles do not only evoke alternatives, they also mark an opposition. This meaning can be described as in (45). In this definition, X and Y are predicates or propositions and are members of a set.

(45) a. Previous context or knowledge makes X relevant.

b. With respect to the current situation, X is not the case, Y is the case.

When the particles associate with a constituent of the sentence, the opposition is with respect to this constituent and an alternative to it. When the particles occur in sentence-final position, the entire sentence is in opposition to an expectation or assumption.

The notion of topic as the element about which the sentence provides information overlaps with the meaning of the contrastive particles proposed here, as the contrastive particles also force a split between a contrasted element and a part of the sentence expressing an opposition with respect to that element. However, describing the particles as contrastive topics is not accurate, at least for *xunyɔ* and *pɔ̀*, as these do not necessarily associate with topics.

In the present study, I have not identified any difference in meaning between the three particles. Further research into sociolinguistic factors that play a role in the use of the particles could show differences between them. It could also be that there are functional differences between the particles that do not show up in narratives. A study of the particles in types of discourse other than narratives would shed light on this.

CHAPTER 6

The additive particle *tsyɛ*

6.1 Introduction

In this chapter, I discuss the meaning and use of the additive particle *tsyɛ*. Unlike additive particles in many European languages, *tsyɛ* is not predominantly a focus particle. The meaning of *tsyɛ* is also different from that of additive particles in English and other Germanic languages, as *tsyɛ* does not require identity between the proposition it occurs in and an alternative proposition. In this chapter, I discuss in more detail in which syntactic positions the particle occurs and in what kinds of pragmatic contexts it is used. I start off with an introduction to the notion of additive particles.

6.1.1 Additive particles

An informal characterization of additive particles is that they associate with an element of the proposition and indicate that what is said about that element also holds for someone or something else. The felicitous use of additive particles depends on the context. This can be seen in (1), which contains the English additive particle *too*. The use of the particle *too* in the second sentence presupposes that people other than *a lot of the men* voted for Karen. As this is indeed what has been said, the sentence is felicitous.

(1) *A week later, when the workers had to vote for the new Committee, most of the women voted for Karen. And a lot of the men voted for her, too.*
(British National Corpus, written)

An infelicitous use of *too* can be seen in (2). Here, the presupposition evoked by the second clause is that a person other than Mo had soup, which is not what is stated in the previous clause. Of course, if this had been stated or implied in the wider context, the sentence would be felicitous.

(2) *# Jo had fish and Mo had soup, too.* (Kaplan 1984, 510)

König (1991, 55) describes additive particles as triggering "the presupposition that there is an alternative value under consideration that satisfies the open sentence in the scope of the particle". This means that a speaker who uses the additive particle presupposes an alternative proposition, which is the same as the expressed one except that the additive particle and the constituent it associates with are replaced by a contextually relevant alternative to this constituent. For the current purpose, I will subdivide this definition into three parts, which can be seen in (3). Note that (3c) is an implicit assumption in the original definition, but it will play a crucial role in my discussion of the Avatime additive particle. I will refer to this part as the identity presupposition.

(3) Definition of additive particles (of the English/German[1] type).

a. the additive particle associates with an element of the proposition (the added constituent)

b. it requires the presupposition of an alternative proposition containing a contextually relevant alternative to the added constituent

c. the proposition without the added constituent is identical to the alternative proposition without the alternative to the added constituent

In example (1), the added constituent is the phrase *a lot of the men*, as this is what the particle associates with. The alternative proposition is *most of the women voted for Karen* which contains a contextually relevant alternative to the added constituent: the phrase *most of the women*. If the added constituent and its alternative are removed from the two clauses, the same incomplete proposition remains: 'voted for Karen'.

Apart from basic additive particles such as *also* and *too*, there are also scalar additive particles such as *even*. The meaning of basic additive particles is included in that of scalar additive particles, but scalar particles have an additional condition: the alternatives that are evoked can be ordered on a scale where elements higher on the scale imply lower ones (König, 1991; Kay, 1990). This usually means that the element marked by the scalar additive particle is considered to be the least likely of alternatives to fill the slot it occurs in. For instance, someone uttering (4) presupposes that there is at least one other person who came, but in addition, the president has to be less likely to have come than this other person.

[1] Definitions such as this have been given for English and German. Based on my intuition as a native speaker, the additive particle in Dutch, *ook*, can be accounted for in the same way. Whether additive particles in other Germanic or other European languages also behave in the same way is a matter for further research.

(4) *Even the president came.*

In many languages one single particle functions both as a basic and a scalar additive particle (König, 1991).

Additive particles have traditionally been described as focus particles (König, 1991), based on the observation that they associate with the focused element in the clause. This is exemplified in (5). In (5a), the particle *also* associates with *book* and in (5b) it associates with *Wendy* (focus accents are indicated by capitalization). Example (5a) requires the presupposition that I gave Wendy something other than a book, whereas (5b) requires the presupposition that I gave a book to a person other than Wendy.

(5) a. *I also gave Wendy a BOOK.*

b. *I also gave WENDY a book.*

Several authors have noticed, however, that English and German additive particles can also associate with contrastive topics instead of foci (Krifka, 1999; Dimroth, 2002).[2] In this case, the particle occurs at the end of the sentence and is marked with a pitch accent. An example can be seen in line 3 of (6), where the particle associates with *her father*. The focused part of the sentence is *seemed to take it quite well*, as this is the answer to the question. The added constituent, *her father*, is thus not in focus (see Chapter 3).

(6) 1 A: *How did her parents react to the news?*

2 B: *Well, her mother didn't worry too much,*

3 *and* ***her father*** *seemed to take it quite well,* ***too****.* (Dimroth, 2002, 892)

The possible association of the additive particle with a non-focused element has also been observed for other languages such as Turkish (Göksel & Özsoy, 2003), Amharic (Gasser, 1985; Demeke & Meyer, 2008) and the East Cushitic language Gawwada (Tosco, 2010). In Kwa languages, additive particles have also been discussed in connection with contrastive topics, as discussed in Section 1.3.2. An example from Aja cited in that section is repeated here as (7). Here, the additive particle *cán* in the final clause associates with a non-focused element. Akan, another Kwa language, also allows the additive particle (*nso*) to occur with non-focused elements, as can be seen in (8) from Amfo (2010).

[2]Krifka (1999) defines contrastive topics as a combination of topic and focus: they are topics, because they are 'what the sentence is about' and they are foci because they evoke alternatives. This way, he can maintain the analysis of the additive particle as a focus particle. I define focus as the main information update of the sentence and by that definition contrastive topics are not focused.

(7) Maria has invited some friends for dinner. For this, she has prepared different dishes.

1 *ègblén ɔ́, nyísɔ́ dḭ̀yí yí é tɔ́ yɛ́ dàdá*
akassa TOP, yesterday since FOC 3s begin 3s cook.RED
'The akassa, she already started to cook it three days ago, ...'

2 *èlán ɔ́, é tɔ̀ yɛ̂ èsɔ́*
meat TOP 3s grill 3s yesterday
'the meat, she grilled it yesterday...'

3 *ǹtɔ́nú **cán**, égbɛ́ é xó yɛ̌ ké*
sauce **ADD**, today 3s hit 3s PRED
'and **as for the sauce**, she prepared it today.'

(Aja: Fiedler 2009, 11)

(8) *àbèrèwá nó ká kyèré-è nò sé.... ɔ̀nó **ńsó** dè àhòbrɛ̀ànsé tíé-ì*
old.lady DEF say show-COMPL her COMP.... she **ADD** take humility listen-COMPL
'The old lady told her$_i$ that... She$_i$ (*ńsó*) listened in humility.'

(Akan: Amfo 2010, 204)

6.1.2 Avatime additive particles

In Avatime, there are two additive particles that have meanings similar to English 'also/too': *fɛ* and *tsyɛ*. These two particles seem to have the same meaning and function. *Tsyɛ* is a borrowing from the inland dialect of Ewe, which is in close contact with Avatime. In the villages of Biakpa, Amedzofe and Gbadzeme, both particles are used, but the people of Vane only use *tsyɛ*. I do not have data on the use of additive particles in the other four Avatime villages (Fume, Dzogbefeme, Old Dzokpe and New Dzokpe). In the dialects in which both particles are used, they seem to be in free variation. Speakers of different age groups and genders use both particles and there are even examples of a single speaker using both particles within the same recording. Examples of *fɛ* and *tsyɛ* can be seen in (9) and (10).

(9) *bíà-pɛ̀ bíà-tsì **fɛ***
C$_{1p}$.POT-good C$_{1p}$.SBJ.POT-grow **ADD2**
'They will be good, they will also grow.'

(conv-amedzofe_110330_WE-friends_1)

(10) *èɛ́-trɛ* *rrr* *lɛ̌* *ba-nùvɔ̀-wa* ***tsyɛ*** *bɛ-sɛ̀*
C_{1s}.SBJ.PROG-go ID then C_{1p}-child-DEF **ADD** C_{1p}.SBJ-leave
bɛ̀ɛ́-trɛ
C_{1p}.SBJ.PROG-go
'He was going and the children, too, left and were going.'
(pear_100719_PhA-DQ)

As most of my data comes from speakers of the Vane dialect, there are very few cases of *fɛ* in my corpus: only 15 as opposed to 563 cases of *tsyɛ*. As the cases of *fɛ* in the corpus are so few, I will restrict the discussion in the remainder of this chapter to *tsyɛ* and leave the exact use and distribution of *fɛ* as a topic for future research.

In the remainder of this chapter I will look into the syntactic distribution and meaning of the particle *tsyɛ*. The main research questions I will address are:

1. With what kinds of elements does *tsyɛ* associate?
    - Is *tsyɛ* a focus particle, similar to additive particles in English and German?
2. What meaning does *tsyɛ* have?
    - Is the meaning of *tsyɛ* the same as that of additive particles in English and other Germanic languages?
    - Is the meaning of *tsyɛ* related to the notion of contrast, as has been suggested for other Kwa languages?

The first question will be addressed in Section 6.2. The second question will be addressed in Section 6.3. In Section 6.4, I discuss some remaining issues and in Section 6.5 I conclude the chapter.

6.2 Syntactic distribution

The particle *tsyɛ* always directly follows the added constituent. This can be seen in (11), repeated from (10), where *tsyɛ* associates with *banùvɔ̀wa* 'the children'.

(11) *èɛ́-trɛ* *rrr* *lɛ̌* *ba-nùvɔ̀-wa* ***tsyɛ*** *bɛ-sɛ̀*
C_{1s}.SBJ.PROG-go ID then C_{1p}-child-DEF **ADD** C_{1p}.SBJ-leave
bɛ̀ɛ́-trɛ
C_{1p}.SBJ.PROG-go
'He was going and the children, too, left and were going.'
(pear_100719_PhA-DQ)

Table 6.1: The distribution of the additive particle *tsyɛ*.

Added Constituent	Count	Percentage
subject	371	66
object	74	13
adjunct	29	5
predicate	28	5
possessor	19	3
conditional	17	3
fragment	10	2
part of PP	6	1
unclear	8	1
total	*562*	*100*

The added constituent is most frequently the subject of the clause. It may also be the object, an adjunct, a predicate, a subordinate (conditional) clause, part of a NP or PP or a 'fragment', a separate phrase without a role in a larger clause. The distribution of these types of added constituents can be seen in Table 6.1.

An example of *tsyɛ* associating with the subject was shown in (11). Example (12) shows the particle associating with the object of the clause.

(12) 1 *a-mɔ̀* *li-wè-le*
C$_{1s}$.SBJ-see C$_{3s}$-sun-DEF
'He saw the sun.'
2 *a-mɔ̀* *ɔ-dzịdzị-ɛ̀* ***tsyɛ***
C$_{1s}$.SBJ-see C$_{1s}$-moon-DEF **ADD**
'He saw the moon, too.' (famprob_110401_MeD-BeK_story)

There are 29 adjuncts marked by *tsyɛ*, an example of which is (13). These usually occur in a sentence-initial position. There are only four cases of a *tsyɛ*-marked adjunct in a position after the verb, one of which can be seen in (14).

(13) Preceding context: 'He knocked on the door of one of his brothers, but he did not hear it. Then he went to the other brother's place.'
nílɔ̀ ***tsyɛ*** *a-zɛ-sa* *ò-pópo-lò = e*
there **ADD** C$_{1s}$.SBJ-IT-knock C$_{2s}$-door-DEF = CM
'There too, he knocked on the door.' (FinSto_100612_MM)

(14) *bɛ̀ɛ́-gbá yà* ***tsyɛ***
C_{1p}.SBJ-fry here **ADD**
'They are frying here too (in addition to other places).'
(conv-rice_110411_3-3)

An example of *tsyɛ* associating with the entire predicate can be seen in (15), where *tsyɛ* is interpreted as associating with *do gbe da ní ba litukpo* 'pray for them'. In example (16), *tsyɛ* associates with a conditional clause (indicated with brackets). In cases like this, *tsyɛ* tends to have a scalar interpretation, leading to a translation as 'even if' (see Section 6.3).

(15) 1 *lɛ lósò kíà-zǒ-dí ba kù-de-ò nu*
C_{3s} reason 1p.SBJ.POT-REC-look:LOC C_{1p} C_{5s}-road-DEF opening
'So we'll be looking forward to their coming.'

2 *kíà-zǒ-do_gbè_da ní ba li-tukpo* ***tsyɛ***
1p.SBJ.POT-REC-pray LOC C_{1p} C_{3s}-head **ADD**
'We'll be praying for them too.' (avopa_100512_1-1)

(16) *lósò* [*xé wo wo-dzí ì-nyɔ tì-glo mè* ***tsyɛ***],
so when 2s 2s.SBJ-return:LOC C_{2p}-hour C_{2p}-six inside **ADD**
wo-tè sì wo-dze ɔ-lí́ ke-pe-a mɛ̀
2s.SBJ-know COMP 2s.POSS:C_{1s}-wife C_{1s}.SBJ-be.at C_{6s}-house-DEF inside
gì le ɛ̀ɛ́-bì̀tɛ ki-dítɔ plɛ ní ke-de-à
REL ? C_{1s}.SBJ.PROG-do C_{4p}-thing:INDF down LOC C_{6s}-back-DEF
kí́ = *wɔ* = *ɛ*
give = 2s.OBJ = CM
'So even if you come home at six, you know that your wife is at home, preparing something for you back there.
(conv-amedzofe_110330_WE-friends_2)

The element marked by *tsyɛ* can also be part of a constituent: either the possessor in a possessive construction, as *wɔ* 'your' in (17), or the object of an adposition, as *béyà* 'this one' in (18).

(17) *wáà-dzi ɔ́-nɔ̀ gì e-kpese o-yo xé*
2s..SBJ.POT-become C_{1s}-person REL C_{1s}.SBJ-start INF-bear.fruit when
wɔ ***tsyɛ*** *li-pì-le líà-blo*
2s **ADD** C_{3s}-poverty-DEF C_{3s}.SBJ.POT-end
'You'll become a human being when it starts to bear fruit and your poverty, too, will end.' (conv-greenhouse_110408_SO-ViA_2)

(18) *bɛ̀ɛ́-kpɛ* *akpɛtɛshiɛ́* *bɛ́-yà* ***tsyɛ*** *mɛ̀*
C_{1p}.SBJ.PROG-put akpeteshi:LOC C_{4p}-PROX **ADD** inside
'Do they also put akpeteshi (alcoholic drink) in these things?'
(conv-rice_110411_3-3)

There are 10 cases of *tsyɛ* associating with a phrase that does not play a grammatical role in a larger clause. In four cases, this is a phrasal answer to a question, as in (19). In the other six cases, the added constituent functions as a so-called Chinese-style topic (Chafe, 1976), i.e. an element occurring in the left-detached position which narrows the scope of interpretation of the remainder of the sentence (see Chapter 4). An example is (20).

(19) 1 A: *kɔ* *nyaŋwɛ* *nì* *nyaŋwɛ* *pɔ́* *be-zě-telephoni* *wɔ*
so who and who CTR:FOC C_{1p}.SBJ-REC-phone 2*s*
klɔ̀ = *ɛ*
there = CM
'So which people called you there?'

2 B: *haaa* *ɔ-fà* ***tsyɛ,*** *wɔ* ***tsyɛ,*** *me-bi-a*
INTJ C_{1s}-uncle **ADD** 2*s* **ADD** 1s.POSS:C_{1p}-child-DEF
'Eeeeh, uncle, you too, my children.' (travel-north_110414_AT-AB)

(20) *lɛ̌* *wɔ* ***tsyɛ*** *kɪ́tɛ* *li-zè* *pɔ̀*
and 2*s* **ADD** how C_{3s}.SBJ-be.NONPRES CTR2
'And as for you (too), how was it?' (conv-ablorme_100715_SO-AS)

Non-subjects marked with *tsyɛ* are frequently left dislocated (see Chapter 4 for more on left dislocation). Out of the 99 cases of objects, objects of adpositions and possessors marked by *tsyɛ*, 44 are left dislocated. An example of a left-dislocated object marked by *tsyɛ* can be seen in (21).

(21) Two people have jumped down from a burning house and have been caught by firemen. The third person is initially afraid and refuses to jump. After a while the firemen come back to him.

1 *àblɔ́ɔ* *gì* *kɪ̀-fʊ́-yɛ̀* *ki-na* = *yɛ* *pɔ́* = *ɛ*
now REL C_{4s}-fire-DEF C_{4s}.SBJ-reach = C_{1s}.OBJ COMPL = CM
a-bá-dɪ̀mɛ
C_{1s}.SBJ-VEN-agree
'Now that the fire had reached him, he agreed.'

2 *a-yɔ...* *yɛ* ***tsyɛ,*** *bɛ-sɔ́lɪ̀* = *yɛ*
C_{1s}.SBJ-jump C_{1s} **ADD** C_{1p}.SBJ-catch = C_{1s}.OBJ
'He jumped... Him too, they caught him.' (FinSto_100524_SO)

Subjects marked with *tsyɛ* can also be left dislocated, but this is relatively less common: out of the 371 subjects marked with *tsyɛ*, 43 are left dislocated (22).

(22) *mɛ* ***tsyɛ*** *aní* *ɔ́-nɔ̀* *dzedze* *mò-nu* *kɪ́=yɛ*
1s **ADD** NEG C_{1s}-person different 1s-be give=C_{1s}.OBJ
'Me too, I am not a stranger to her.' (conv-funeral_100528_7-1)

The pattern that emerges from the distribution presented here does not match the traditional analysis of additive particles as focus particles. The particle *tsyɛ* associates most frequently with subjects, which are typically not focused. Of the non-subject referents that *tsyɛ* associates with, many are left dislocated, which is a structural position for background elements (see Chapter 4).[3] This does not mean that the particle cannot associate with focused elements. In (12) above, *tsyɛ* associates with the unmarked focused part of the sentence. The particle may also associate with elements that are marked for focus (see also Chapter 3), but this is very rare.[4] There is one case in my corpus of spontaneous discourse (23). In elicitation, focus marking on *tsyɛ* is also accepted (24). Note that the extra high tone which marks focus is realized on the additive particle, indicating that the additive particle forms a syntactic constituent with the element it associates with.

(23) *ba* *ke-pe-a* *mɛ̀,* *aní* *sɪ̀* *wɔ* *ke-pe* *mè* ***tsyɛ́***
C_{1p} C_{6s}-house-DEF inside, NEG COMP 2s C_{6s}-house inside **ADD:FOC**
wɔ-sɛ̀ *wɔ̀-bá* *lo*
2s.SBJ-leave 2s.SBJ-come FP
'(It started at) their house, it is not that (it started before) you left [your house (tsyɛ)]$_{FOC}$ and came.' (conv-hair_100805_CA-AB)

(24) 1 A: *wɔ̀-ze-di* *afua* *tete*
2s.SBJ-IT-look Afua only
'Did you only visit Afua?'
2 B: *o* *akɔsua* ***tsyɛ́*** *mà-ze-di*
no Akosua **ADD**:FOC 1s.SBJ-IT-look
'No, I also visited Akosua. (elic-ctrpart_130812_SO)

[3] In contrast, in a study of Dutch focus particles, Foolen et al. (2009) found that the additive particle *ook* 'also' most often associates with elements following the finite verb and rarely with clause-initial elements.

[4] The fact that the additive particle does not tend to co-occur with focus marking is likely related to a semantic or pragmatic incompatibility. As I explained in Chapter 3, the use of the focus construction usually implies that alternatives to the focus-marked element are excluded from occurring in the same proposition, whereas the additive particle tends to indicate that there are alternatives to the added constituent that occur in the same proposition (see Section 6.3).

The Avatime additive particle may thus associate with focused elements, but is most of the time not used as a focus particle.

6.3 Meaning

6.3.1 Data

To investigate the meaning of *tsyɛ*, I proceeded in a similar way as I did with the contrastive particles (Section 5.3). I used a selection of my corpus which includes only narratives, to reduce the recourse to shared knowledge outside of the narrative context. Within this corpus I identified the occurrences of *tsyɛ* and studied the contexts in which it occurs.

There are 133 cases of *tsyɛ* in the corpus of narratives. In many of these cases, *tsyɛ* seems to have the same meaning as English or German additive particles. This meaning was presented in (3), repeated here as (25).

(25) Definition of additive particles (of the English/German type).

a. the additive particle associates with an element of the proposition (the added constituent)

b. it requires the presupposition of an alternative proposition containing a contextually relevant alternative to the added constituent

c. the proposition without the added constituent is identical to the alternative proposition without the alternative to the added constituent

I will refer to the proposition without the added constituent and to the alternative proposition without the alternative to the added constituent as incomplete propositions. According to the definition above, the two incomplete propositions are semantically identical. In 6.1.1, I referred to this part of the definition as the 'identity presupposition'.

Of the 133 constructions with *tsyɛ* in the Avatime corpus, there are 30 cases in which the two incomplete propositions are not identical. There are 6 more cases in which it is not clear whether there is an identity presupposition or not. In the other 97 cases, the definition in (25) holds. When the incomplete propositions are not identical, they are either similar or in a stereotypical relation. In this section, I will describe these cases of non-identity in detail, but I will first briefly discuss the cases for which the definition can account.

An example of *tsyɛ* which conforms to the definition above can be seen in (26), where the added constituent is 'his wife' and the alternative proposition occurs in the immediately preceding clause. The alternative to the added

constituent is ‘the tortoise’s children’ and the two incomplete propositions are identical (‘X came out’).

(26) *ka-sàmlà* *ye-bi-à* *be-dò,* *ye-dze*
C$_{6s}$-tortoise C$_{1s}$.POSS:C$_{1p}$-child-DEF C$_{1p}$.SBJ-move.out C$_{1s}$.POSS:C$_{1s}$-wife
tsyɛ *e-dò*
ADD C$_{1s}$.SBJ-move.out
‘The tortoise’s children came out, his wife also came out.’
(kadzidzi-turtle_PKD_20110924-1)

In example (26), the alternative proposition immediately precedes the additive one. There are also cases in which the alternative proposition was mentioned further back in the discourse. An example can be seen in line 2 of (27). The alternative proposition is ‘the man did kplafinya’, which was described earlier in the story. There are also cases in which the alternative proposition is not literally expressed, but has to be inferred. This is exemplified in line 1 of (27), where the alternative proposition ‘the man is old / has grown old’ is inferred from the noun *ɔkàtsì* ‘old man’.

(27) There was once an old man who was a weaver. When he was weaving cloths it sounded like *kplafinya kpatafinya kplafinya kpatafinya*. The children would be watching him and laughing at him and shouting ‘old man kplafi’. One day he was weaving and it sounded like that. The children were sitting there and laughing.

1 *kò* *ɔ-kà-tsì* *sị* *mlɔ* *ba-nụ̀vɔ́* *yá* *tete* *mlɔ* ***tsyɛ***
just C$_{1s}$-father-old say 2p C$_{1p}$-child PROX like.this 2p **ADD**
mlɛ-tá-tsì
2p.SBJ-INT-old
‘Just then the old man said: “you children here, you too will grow old.’

2 *mlɔ* ***tsyɛ*** *mlɛ-tá-bìtɛ* *kplafínya*
2p **ADD** 2p.SBJ-INT-do kplafinya
‘You too will do *kplafinya*.”’ (kadzidzi_ET_20110827_2)

The particle *tsyɛ* may have a scalar interpretation, similar to English *even*. These cases still fall under the definition given in (25) above, as a scalar additive meaning is a subtype of the basic additive meaning (see Section 6.1.1). Most of the time, scalarity is a possible but not necessary interpretation, but there are some cases in which the only possible interpretation is scalar. This is usually the case when the particle is combined with a conditional (see example (16) in the previous section) or with negation marking, as in (28). In these cases, a translation as ‘also’ or ‘too’ does not work. There

are seven such cases in the corpus. In (28), *tsyɛ*, combined with the negation marking, indicates that asking the children something would have been the most likely thing for the man to do.

(28) A man just discovered that one of his three baskets of pears has been stolen. Then he sees three children walking past eating pears.

kɔ *ó-vì=wa* *liboeboe* ***tsyɛ*** *e-di=wa* *duu*
and C_{1s}.SBJ.NEG-ask=C_{1p}.OBJ anything **ADD** C_{1s}.SBJ-look=C_{1p}.OBJ ID
'And he did not even ask them anything, he just stared at them.'
(pear_100719_PhA-DQ)

As I mentioned above, out of the 133 cases of *tsyɛ*, there are 30 (23%) in which there is no presupposition of identity between two open propositions, i.e. (25c) in the definition given above does not hold. In the remainder of this section, I will give examples of such cases and indicate how *tsyɛ* seems to be used there. In Section 6.3.2, I will discuss what kind of analyses of the meaning of *tsyɛ* could account for these usages.

All cases where there is no identity presupposition are cases where *tsyɛ* associates with a non-focused sentence-initial element. A first example can be seen in (29). There is an alternative (the people who branched to the right) to the added constituent (another group), but what is said about the alternative (they went to Togo) is not identical to what is said about the added constituent (they reached Ho). Thus, there is no presupposition that there is a different group of people that also reached the lower side of Ho.

(29) Previous context: 'When they were coming towards the Ho area, some of them branched to the right. Those who branched to the right went to Togo. They are the Gafe people.' (...)

lɛ̌ *kà-paàtɔ* ***tsyɛ*** *kɛ-na* *òholò* *kǎlètụ̀ịa*
and C_{6s}-part:INDF **ADD** C_{6s}.SBJ-reach Ho lower.side
'Then another group (tsyɛ) reached the lower side of Ho.'
(Avatime-history_BB_20110905)

In 9 out of the 30 cases of *tsyɛ* that lack an identity presupposition, there is a clear similarity between the two incomplete propositions. For instance in (29), both groups of people traveled to a certain place. In these cases it thus seems that rather than requiring strict identity between incomplete propositions, the particle only requires some identical features.

In the other 21 cases there is no such similarity. In many of these, there is a stereotypical relation between incomplete propositions. A clear example of this is (30). Proposing and accepting are not similar in the sense that they

have features in common, but they are complementary parts of the same event.

(30) 1 *lɛ̌ ó-nyime sị̀ o e-ti a-pɔnị̀=yɛ*
and C_{1s}-man say o C_{1s}.SBJ-follow SVM-move.closer=C_{1s}.OBJ
sì yáà-gbanị̀=yɛ
COMP C_{1s}.LOG.SBJ.POT-lead=C_{1s}.OBJ
'And the man said 'o'; he got close to her and said he would marry her.'

2 *ɔ́-dzɛ* ***tsyɛ*** *ó-gbe kóŋ lɛ̌ a-dị̀mɛ*
C_{1s}-woman **ADD** C_{1s}.SBJ.NEG-refuse at.all and C_{1s}.SBJ-agree
sì áà-zè nì yɛ
COMP C_{1s}.SBJ.POT-be.NONPRES with C_{1s}
'The woman (tsyɛ) did not refuse at all and she agreed to marry him.' (kadzidzia_110406_AuA)

Another example is (31), in which the two lines show complementary sides from the same struggle: one person trying to run and another person holding him back. Altogether there are 7 cases of such complementary event pairs.

(31) In the forest, Atrodze and Lulu want to eat leftover porridge at the location of a mysterious party. They are hungry, but Lulu wants to wait until the people have gone before going to take the porridge. Atrodze does not agree.

1 *àtrodze e-tsyidzyì sị̀ yí-ze-halì*
Atrodze C_{1s}.SBJ-be.impatient COMP C_{1s}LOG.SBJ.SBJV-IT-collect
lị̀-fɪ̀flị̀-nɛ
C_{3s}-porridge-DEF
'Atrodze was impatient to go and collect the porridge.'

2 *lulu* ***tsyɛ*** *e-vù=ye sị̀ ɔ-kɪ́-trɛ*
Lulu **ADD** C_{1s}.SBJ-hold=C_{1s}.OBJ COMP C_{1s}.SBJ-PROH-go
'Lulu (*tsyɛ*) was holding him so he would not go.'
(kadzidzia_110406_QM)

There are eight other cases in which *tsyɛ* indicates a stereotypical relation between incomplete propositions. In these cases, even though the two incomplete propositions do not describe complementary events, there is a clear expectation of how the situation will unfold, and *tsyɛ* indicates that what is said about the added constituent is according to this expectation. Often, this expectation is set up by what is claimed about the alternative to the *tsyɛ*-marked element. An example is shown by the use of *tsyɛ* in line 3 of (32).

(32) A man just discovered that one of his three baskets of pears has been stolen. Then he sees three children walking past eating pears.

1 *bɛ̀ɛ́-ŋà e-séwi-là xé bɛ̀ɛ́-za*
C_{1p}.SBJ-eat C_{3s}-fruit-DEF and C_{1p}.SBJ-pass
'They (the children) were eating the fruit and were passing by.'

2 *kɔ ó-vì=wa liboeboe tsyɛ*
and C_{1s}.SBJ.NEG-ask=C_{1p}.OBJ anything ADD
e-di=wa duu
C_{1s}.SBJ-look=C_{1p}.OBJ ID
'And he did not even ask them anything, he just stared at them.'

3 *lɛ̌ ba-nùvɔ̀-wa **tsyɛ** bé-sɛ lɛ̌ yɛ **tsyɛ** a-kɔ̀*
then C_{1p}-child-DEF **ADD** C_{1p}.SBJ-leave then C_{1s} **ADD** C_{1s}.SBJ-take
dɔ̀mɛ kpɛ ní kà-sɔ-a mɛ̀
thing put LOC C_{6s}-basket-DEF inside
'And the children (*tsyɛ*) left and then he (*tsyɛ*) put the things into the basket.' (pear_100719_PhA-DQ)

In this example, what was said about the man is that he did not ask the children anything. This sets up the expectation that the children will just continue walking by and leave, which is indeed what is said about them. The same can be said about the following clause where the man is marked with *tsyɛ* to indicate that, as the children have left, there's nothing left for him to do but simply continue the work he was doing before, putting pears into his basket.

In (33), the expectation is set up by the previous context: a man returning home from prison. What is predicated about both the *tsyɛ* marked element (his child) and its alternative (his wife) is something that happened to them while their husband/father was in prison. These events can both be thought of as expected within the context.

(33) After being in prison for a long time, a man returns home.

1 *ye-dze á-kɔ tsya=yɛ kɪ́lɛ gì*
C_{1s}.POSS:C_{1s}-wife C_{1s}.SBJ-take forgive=C_{1s}.OBJ how REL
a-bɪ̀tɛ petee
C_{1s}.SBJ-do all
'His wife forgave him everything he has done.'

2 *lósò ye-bi-è **tsyɛ** a-é-tsì*
so C_{1s}.POSS:C_{1s}-child-DEF **ADD** C_{1s}.SBJ-VEN-grow
e-dzì ɔ̀-yásɔwi
C_{1s}.SBJ-become C_{2s}-young.man
'His child (*tsyɛ*) has grown up to become a young man.'
(famprob_110401_MeD-BeK_story)

Finally, there are six cases where *tsyɛ* does not evoke an identity presupposition, but which cannot clearly be classified as cases of similarity or stereotypicality. More research is needed to find out why *tsyɛ* is used in these cases. Some of them could be production errors (of one of them, a consultant has in fact mentioned that the sentence would be 'better without *tsyɛ*'). Others might exemplify further uses of *tsyɛ* that I have not recognized, or they might on closer inspection turn out to belong to the categories I mentioned here. An example of a case in which it is not clear why *tsyɛ* is used is (34). It is not clear in this example what the alternative would be to 'the pears' and moreover, it would be far-fetched to claim that the pears making the boy jealous is a stereotypical continuation of reaching the pears.

(34) 1 *lɛ̌ a-na péya=ɛ*
then C_{1s}.SBJ-reach pear=CM
'Then he reached the pears.'

2 *péya gì a-na=ɛ ma-mɔ̀ sì̩ péya* ***tsyɛ*** *kuraa*
pear REL C_{1s}.SBJ-reach=CM 1s.SBJ-see COMP pear **ADD** at.all
bèé-ku yɛ ka-ŋuza
C_{1p}.SBJ.PROG-enter? C_{1s} C_{6s}-jealousy
'The pears he reached, I saw that the pears (tsyɛ) were making him jealous.' (pear_100517_MM-BK-FK)

In this section I have shown that 73% of the cases of *tsyɛ* conform to the traditional definition of the function of additive particles. In the other cases, *tsyɛ* is used to indicate either a similarity or a stereotypical relation between incomplete propositions. In the latter case, the added constituent and its alternative are involved in closely interrelated events and/or act according to expectations about how the situation will unfold. A summary of the number of cases of *tsyɛ* that fall into each of these categories can be seen in Table 6.2.

Table 6.2: Usages of the additive particle *tsyɛ*.

Usage	Number
identity presupposition	97
no identity preupposition	30
- similarity	9
- stereotypicality	15
- do not know	6
presupposition unclear	6
total	*133*

6.3.2 Analysis

In the previous section, I observed that *tsyɛ* is used to indicate either identity, similarity or stereotypicality. There are two ways in which these three interpretations could be analyzed: the particle could be polysemous with three distinct but related senses or the three interpretations could be derived from a single sense. A polysemy account is less attractive, because it seems ad-hoc to suggest a separate sense for every context in which the particle is encountered. It is more likely that *tsyɛ* expresses some more general meaning which happens to be used mostly in the three types of context described here.

The danger of such a unified analysis is that the unifying concept may become vague and unexplanatory. Gasser (1985) proposes a unified analysis for the Amharic additive particle *-m*, which, like the Avatime particle, is used for a number of different functions. Gasser suggests that this particle encodes the general concept of continuity. He does take note of the disadvantages of such an approach, as he mentions that "the meanings arrived at may be so general or abstract as to be of little use in revealing how the morphemes actually function" (Gasser, 1985, 60). Yet, Gasser views this kind of analysis as the most useful starting point for describing the function of particles. The notion of continuity indeed seems to be too abstract and Gasser does not provide an account for how the observed functions of the particle derive from this meaning. For the Avatime additive particle, I will propose a clearer explanation of its general meaning and of how this relates to the contexts of identity, similarity and stereotypicality.

In informal terms, I suggest that the particle *tsyɛ* indicates that two situations typically 'go together'. More precisely, when a speaker uses the particle *tsyɛ* she presupposes (i) that there is an alternative proposition including a contextually salient alternative to the *tsyɛ*-marked element (as in the original definition of additive particles), and (ii) that the two incomplete propositions denote events that uncontroversially co-occur or follow each other. The term uncontroversial indicates that the speaker does not expect the listener to be surprised by the co-occurrence of these two events. I will now illustrate how this basic meaning results in the different interpretations described in the previous section.

The cases of identical incomplete propositions can be accounted for in a straightforward way: it is clearly unsurprising that two identical events co-occur or follow each other. Note that according to the definition only the incomplete propositions need to be unsurprising. It may still be the case that the added constituent itself is surprising in the context. For instance, in (35), repeated from (27), the utterance in line 2 could be argued to be surprising to the children: they do not realize some of them will be weavers one day.

However, the surprising part is the *tsyɛ*-marked element. The incomplete propositions 'somebody weaving' and 'somebody weaving', by virtue of being identical, uncontroversially co-occur.

(35) There was once an old man who was a weaver. When he was weaving cloths it sounded like *kplafinya kpatafinya kplafinya kpatafinya*. The children would be watching him and laughing at him and shouting 'old man kplafi'. One day he was weaving and it sounded like that. The children were sitting there and laughing.

1 *kò ɔ-kà-tsì sị mlɔ ba-nụ̀vɔ́ yá tete mlɔ* ***tsyɛ*** *mlɛ-tá-tsì*
just C_{1s}-father-old say 2p C_{1p}-child PROX like.this 2p **ADD**
2p.SBJ-INT-old
'Just then the old man said: "you children here, you too will grow old.'

2 *mlɔ* ***tsyɛ*** *mlɛ-tá-bìtɛ kplafínya*
2p **ADD** 2p.SBJ-INT-do kplafinya
'You too will do *kplafinya*."' (kadzidzi_ET_20110827_2)

The cases in which *tsyɛ* is used when there is what I called a stereotypical relation between events also follow from my notion of 'going together'. This is clearest in the cases of converse verb pairs. For instance, the events of proposing and accepting (see example (30)) clearly go together as one uncontroversially follows the other. In cases such as (32), the events in which *tsyɛ* is used are also presented as uncontroversial consequences: if the man they are passing does not ask the boys any questions, then they can be expected to continue walking and in this situation the man can only be expected to continue his work.

In cases of similarity, it is more difficult to argue that the two incomplete propositions 'go together', because if they are similar but not identical, they could easily be perceived as contrastive. However, I argue that what the speaker does by using *tsyɛ* in these cases is to force the interpretation that it is not surprising for the two events to co-occur. In the case of (29), going to Togo and going to Ho do not uncontroversially co-occur by default, but by using *tsyɛ*, the speaker creates this interpretation, indicating that this was the natural course of events and backgrounding the differences between the two events.

A question that remains is why *tsyɛ* is used much more frequently for identical event pairs than for other cases. It seems that identical situations are more obligatorily marked with *tsyɛ* than similar or stereotypical situations. The reason for this could be what has been called the 'distinctiveness

principle' (Krifka, 1999; Sæbø, 2004), which stipulates that when two things are said about an element and its alternative, there is an implication that these are different things. To override this implication, when the two things are identical, the additive particle must be used. In the similar and stereotypical situations, the two events are distinct, so the particle is not necessary but can optionally be used to background the distinctness. More research is needed to confirm this hypothesis. In particular, my data does not show that the additive particle is obligatorily used in identical situations. Obligatoriness cannot be established based on a corpus study; elicitation is needed to confirm it. It would also be useful to investigate to what extent the particle is obligatory in similar and stereotypical events. These issues will partly be addressed in Chapter 7.

On my account of the particle *tsyɛ*, the meaning of the Avatime additive particle is fundamentally different from that of its English and German 'counterparts', even though they are often used in similar contexts. This illustrates that a certain interpretative effect that is observed in different languages does not necessarily mean these languages share a linguistic category (for a similar argument made about the notion of focus, see Matić & Wedgwood, 2013).

6.4 Remaining issues

In this section I discuss three remaining issues. The first is whether the particle *tsyɛ* can be seen as a clause connector, associating with the entire clause rather than with a single constituent. The second issue is whether *tsyɛ* indicates referent shift and the third issue is whether *tsyɛ* can indicate contrast.

6.4.1 Association with the clause

In the cases where *tsyɛ* occurs without identity presupposition, one could argue that it does not associate semantically with the immediately preceding constituent but takes scope over the entire clause. If the associate of the particle is the entire clause in these cases, the original definition of additive particles, including the identity presupposition, can be kept intact. This is because only the part of the clause that *tsyɛ* does not associate with has to be identical to an alternative proposition. If *tsyɛ* associates with the entire clause, we do not expect any identity. This is possible in English, but I will argue that it is not a plausible analysis for the Avatime particle *tsyɛ*.

An example of the English particle *also* associating with the entire clause can be seen in (36). The particle *also* occurs clause-initially and associates with the entire last clause, connecting it to the previous one. There is no

identity between the two clauses, but taking a step up in generality, there is identity. The second sentence is a consequence of what is described in the first sentence: the bad state of the economy. Starting the third clause with *also* indicates that this is another consequence of this same situation.

(36) *The economy in the USA is going through rough times these days. Banks are struggling and the value of homes is rising.* ***Also****, many employees are being laid off.* (http://forum.wordreference.com/showthread.php?t=1337878)

This example is reminiscent of the Avatime example in (33), repeated here as (37). If we argue that in this example, *tsyɛ* associates with the entire clause 'his child grew up', we do not have to worry about explaining why there is no identity between the two incomplete propositions: there is no identity because the entire clause is the added constituent. Just like in (36), both clauses bear the same kind of relationship to the previous context.

(37) After being in prison for a long time, a man returns home.

1 *ye-dze* *á-kɔ* *tsya=yɛ* *kɪ̀lɛ* *gì*
C_{1s}.POSS:C_{1s}-wife C_{1s}.SBJ-take forgive=C_{1s}.OBJ how REL
a-bɪ̀tɛ *petee*
C_{1s}.SBJ-do all
'His wife forgave him everything he has done.'

2 *lósò* *ye-bi-è* ***tsyɛ*** *a-é-tsì*
so C_{1s}.POSS:C_{1s}-child-DEF **ADD** C_{1s}.SBJ-VEN-grow
e-dzi *ɔ̀-yásɔwi*
C_{1s}.SBJ-become C_{2s}-young.man
'His child (*tsyɛ*) has grown up to become a young man.'
(famprob_110401_MeD-BeK_story)

However, I argue that *tsyɛ* cannot be analyzed as behaving on a par with *also* in examples such as (36). There are four reasons for this. First, unlike English additive particles, *tsyɛ* normally has a fixed position with respect to the added constituent: it directly follows it. Thus, if *tsyɛ* were to associate with the entire clause, we would expect it in clause-final position. In fact, as I showed in Section 6.2, there are cases in which *tsyɛ* associates with a predicate or a subordinate clause, in which case it occurs in clause-final position.

Second, on this interpretation, *tsyɛ* in examples such as (37) would not be evoking an alternative to the immediately preceding constituent, as all it does is evoke an alternative to the entire clause. This means that it should be possible for *tsyɛ* in this position to connect two clauses with the same subject. This does not occur in my corpus and is judged infelicitous by my

consultants. An example can be seen in line 2 of (38), where *tsyɛ* follows the pronoun *yɛ* which refers to *Komla*, the subject of the previous sentence. To make this example felicitous, one either has to assume *yɛ* is not co-referent with *Komla*, or *tsyɛ* should be moved to sentence-final position.

(38) 1 *kɔmla e-bu lị-kpa*
Komla C_{1s}.SBJ-remove C_{3s}-fish
'Komla caught the fish.'

2 *#lɛ̌ yɛ* ***tsyɛ*** *a-lụlɔ̀=lɛ*
and C_{1s} **ADD** C_{1s}.SBJ-clean=C_{3s}.OBJ
Intended meaning: 'And he cleaned it too.'
(elic-add-part_130822_PKD)

Third, in sentences in which *also* associates with the whole clause, the two connected clauses do not necessarily contain referents from a set of alternatives (for instance, in (36) *banks* and *employees* are not set-members). In the Avatime corpus, elements marked by *tsyɛ* are almost always members of a contextually salient set, another member of which occurs in the alternative proposition. In (37), *tsyɛ* does not only indicate that the two propositions are related, it indicates that they are related with respect to a set of alternatives: 'his wife' and 'his son'. This makes the interpretation of (37) quite different from that of (36): (37) clearly compares what is said about one referent to what is said about another, whereas *also* in (36) functions more like a clause connector.

Finally, if *tsyɛ* associated with the entire clause, there is no explanation for why it does so only when the two clauses are similar or in a stereotypical relation.

6.4.2 Referent shift

A possible alternative analysis for some of the cases where *tsyɛ* occurs with non-identical incomplete propositions is to analyze *tsyɛ* as marking a shift of the main referent or actor of the event. An example of a case where such an analysis seems to work is line 3 of (39), repeated from (32).

(39) A man just discovered that one of his three baskets of pears has been stolen. Then he sees three children walking past eating pears.

1 *bɛ̀ɛ́-ŋà e-séwi-là xé bɛ̀ɛ́-za*
C_{1p}.SBJ-eat C_{3s}-fruit-DEF and C_{1p}.SBJ-pass
'They (the children) were eating the fruit and were passing by.'

2 *kɔ ó-vì=wa liboeboe tsyɛ*
and C_{1s}.SBJ.NEG-ask=C_{1p}.OBJ anything ADD
e-di=wa duu
C_{1s}.SBJ-look=C_{1p}.OBJ ID
'And he did not even ask them anything, he just stared at them.'

3 *lɛ̌ ba-nùvɔ̀-wa **tsyɛ** bé-sɛ lɛ̌ yɛ **tsyɛ** a-kɔ̀*
then C_{1p}-child-DEF **ADD** C_{1p}.SBJ-leave then C_{1s} **ADD** C_{1s}.SBJ-take
dɔ̀mɛ kpɛ ní kà-sɔ̣́-a mɛ̀
thing put LOC C_{6s}-basket-DEF inside
'And the children (*tsyɛ*) left and then he (*tsyɛ*) put the things into the basket.' (pear_100719_PhA-DQ)

I analyzed the two cases of *tsyɛ* in line 3 as indicating stereotypicality: because the man did not ask the children anything, it is unsurprising that they will walk on and leave and then it is also unsurprising that the man will continue putting pears into his basket. However, it is also possible that in cases such as this, there is no presupposition of a contextually salient alternative and of incomplete propositions 'going together' and *tsyɛ* simply indicates a shift of the main participant of the event. Such an account could possibly also explain some of the six cases of *tsyɛ* for which I indicated that I had no explanation as to why the particle was used, such as (34).

The question remains why the shift of referent needs to be marked in these cases, as in narratives the great majority of such shifts are not marked with any particle; using a full noun phrase (as opposed to a pronoun or subject marking only) is usually enough to indicate a shift. But there is an indication that for some speakers, *tsyɛ* may be in the process of becoming a shift marker. I found this in a study of four Avatime narratives, where I marked all occurrences of *tsyɛ* and all cases of a shift of the main referent or actor. Three of the four narratives are very similar in that most shifts were not marked with *tsyɛ*: out of a total of 48, 40 and 36 shifts respectively, 2, 4 and 6 were marked with *tsyɛ*. The particle is clearly not (just) a shift marker in these cases. However, the fourth narrative shows a different pattern: out of 17 shifts of the main referent, 11 are marked with *tsyɛ*. There are two differences between this last narrative and the others: the speaker of the last narrative is in his early twenties, whereas the other three speakers are above 60 years old, and this is an elicited story (pear story), whereas the other stories are non-elicited.

More investigation is needed to determine whether this is an isolated case, or whether there is a generational difference in the usage of *tsyɛ*. It is also important to remember that even though the speaker of the fourth narrative seems to use *tsyɛ* quite consistently to indicate shifts of the main

referent, this does not mean that the initial analysis of *tsyɛ* presented here is wrong: in most cases his use of *tsyɛ* is also consistent with expressing identity, similarity or stereotypicality between incomplete propositions. All in all, the possibility of *tsyɛ* being used to mark a shift of the main referent, at least by some speakers, will remain open and needs further investigation.

6.4.3 Contrast

A final question that remains is how *tsyɛ* relates to the notion of contrast. As I mentioned in Section 6.1.1, English and German additive particles have been claimed to associate with contrastive topics. There are also several other languages in which additive particles have been analyzed as expressing contrast. Tosco (2010) analyzes the Gawadda additive particle as a marker of contrast, Fiedler (2009) analyzes the Aja (Kwa) additive particle as marking contrastive topics and Demeke & Meyer (2008) describe the Amharic additive particle *-mm* as a marker of contrastive focus. Most of these authors are not explicit about what they take contrast to mean. To see how additive particles relate to the notion of contrast, it first has to be clear how this notion is to be defined.

In Sections 1.2.3 and 5.3.1, I made a distinction between contrast in the broad sense and contrast in the narrow sense. Contrast defined broadly includes any linguistic device that evokes alternatives, whereas contrast defined in the narrow sense refers to evoking alternatives and, in addition, presupposing an opposition between the alternatives. The broadly defined notion of contrast is what Krifka (1999) has in mind when he claims that the additive particle can associate with contrastive topics. For Krifka (1999, 113), contrastive topics "come with alternatives", indicating "there are other things about which information is required." In this sense, *tsyɛ* can indeed associate with contrastive topics, but it cannot be called a marker of contrast. The broad notion of contrast includes *tsyɛ*, but does not adequately define it - there is more to the meaning of *tsyɛ* than evoking alternatives - and includes other linguistic devices as well, such as the contrastive particles described in Chapter 5. The narrowly defined notion of contrast, on the other hand, does not apply to *tsyɛ*. As I showed in Chapter 5, this notion applies to the contrastive particles *kɔ*, *pɔ̀* and *xunyɔ*. *Tsyɛ*, even though there might be cases where it is used in the context of an opposition, clearly does not have opposition as part of its meaning, as it is mostly used to indicate identity between alternatives. The notion of additivity is related to the narrowly defined notion of contrast in the sense that both notions include in their meaning (i) the presupposition of an alternative proposition which includes an alternative to the marked element, and (ii) the presupposition of a certain relation

between the two incomplete propositions. In the case of additivity as traditionally defined, this relation is identity and in the case of contrast defined in the narrow sense it is opposition. The Avatime particle *tsyɛ* can be seen as in between these two extremes. The two incomplete propositions do not have to be identical, but they denote events that uncontroversially co-occur or follow each other.

6.5 Summary

In this chapter, I have shown that the Avatime additive particle *tsyɛ* always occurs at the end of the constituent it semantically associates with and it is not restricted to constituents with a certain information structural status (focus or background). Unlike additive particles in English and German, the Avatime particle *tsyɛ* is thus not predominantly a focus particle.

Tsyɛ requires the presupposition of an alternative proposition which contains a contextually salient alternative to the element associated with *tsyɛ*. In this sense, it conforms to the traditional analysis of additive particles. However, *tsyɛ* does not require identity between the two incomplete propositions, which is what additive particles have traditionally been assumed to do. In most cases of *tsyɛ* in my corpus of narratives, there is identity between the two incomplete propositions, but in 23% of the cases, there is a different relation. In these cases, the two incomplete propositions are either similar or stereotypically related. The different usages of *tsyɛ* can be accounted for by assuming the events denoted by the two incomplete propositions uncontroversially co-occur or follow each other.

All in all, the additive particle *tsyɛ* is quite different from its counterparts in English and German in that it does not necessarily associate with focus and it does not require identity between the two incomplete propositions. This shows that particles in different languages that have a common interpretation in a restricted context do not necessarily have the same meaning. Such particles can thus not necessarily be analyzed as different ways of expressing some cross-linguistic notion. Only a detailed investigation of the contexts in which particles occur, leading to language-specific definitions, can guarantee descriptive adequacy and form the basis for thorough comparative research.

CHAPTER 7

Contrastive and additive particles: a production experiment

7.1 Introduction

In the previous chapters, I have investigated the meanings of the additive particle *tsyɛ* and the contrastive particles *pɔ̀*, *kɔ* and *xunyɔ*, based on corpus research. The additive and contrastive particles have in common that they can be used when two set members are compared and there is a relation between the events in which the two set members occur. In the case of the additive particle, I characterized this relation as 'going together', i.e. uncontroversially co-occurring or following each other (see Section 6.3.2). In the corpus, this manifests itself as one of three possibilities: identity - the two set members take part in identical events, similarity - the two set members take part in similar events, or stereotypicality - the two set members take part in stereotypically co-occurring events. The contrastive particles were analyzed as indicating an opposition between two set-members, i.e. something that is true for one of them does not hold for the other.

A disadvantage of corpus studies such as these is that only situations in which the particles are used are analyzed. It is very difficult to look for situations in which the particles could have been used but were not used. Because of this, it is hard to conclude whether or not the particles are obligatory, optional or impossible in certain contexts.

An experimental setting allows for the investigation of such questions. It also allows for a more precise investigation of what factors of the context contribute to the use of the particles. As the corpus used for this thesis is

relatively small and the context very rich, it is not always possible to know which elements of the context the particles are sensitive to. Using stimulus materials, the context can be carefully manipulated.

In this chapter, I describe an exploratory production experiment which I designed to shed light on several hypotheses and questions that were raised by the previous two chapters on the contrastive and additive. I carried out three related experiments, using a set of video stimuli. The video clips show event pairs: two events carried out by different people. I manipulated the event pairs along two dimensions. The first is the similarity of the events: some are identical, some are similar, some are opposite and some are unrelated. I also took into account the objects that were acted upon, which could be either identical, different, or opposite in size. The second dimension is the arrangement of the events in time and space: whether the two events take place in sequence, simultaneously, with an intervening event or in separate clips with only one actor in each clip. As many factors are included, it will not be possible to investigate the relevant factors in a great amount of detail. This is a good strategy to explore what factors may be of influence, but further research will be needed to strengthen the findings and provide more detail.

The following hypotheses and questions will be addressed:

1. The additive particle *tsyɛ* is most often used in the description of identical events. In Section 6.3.2 I suggested that the additive particle indicates that two events 'go together'. As identical events go together by default, they are frequently described using the additive particle. The strong version of this hypothesis is that identical events are obligatorily marked with the additive particle. A weaker version is that marking is not obligatory but strongly preferred and additive particles will be more frequent in the description of identical events than in the description of non-identical events.

2. The additive particle *tsyɛ* can be used to indicate similarity between events. In Section 6.3.2 I suggested that additive particles can be used with events that do not inherently go together to highlight their similarity. Because of this, I expect that similar events pairs can be described using the additive particle, but are not obligatorily marked with it. I expect similar events to be described with the additive particle more often than unrelated events, but less often than identical events.

3. The contrastive particles indicate an opposition between events. In Section 5.3.3 I suggested that an opposition between two predicates

or propositions means that they are members of a contextually relevant set. This set consists of related elements that mutually exclude each other. The particles are thus expected to be used most when the two events mutually exclude each other, less frequently when the two events do not clearly form a set and not at all when the two events are identical. It could also be the case that event pairs that are described with semantically opposite verbs such as 'put on' and 'take off' are more saliently opposite than others and will be more likely to be described using contrastive particles than other types of opposite event pairs.

4. The additive and contrastive particles associate with elements that are members of a contextually relevant set. Two elements are more likely to be perceived as set members when they appear together. I expect that when the two actors of the two events do not appear together in one video, they are less likely to be perceived as set members and thus less likely to be marked with additive or contrastive particles.

5. Additive and contrastive particles may be markers of referent shift. In Section 6.4.2 I suggest that the additive particle *tsyɛ* may be used by some speakers to indicate shift of the main referent. Analyzing *tsyɛ* as a shift marker could potentially explain the cases in which it is not used to indicate identity. The contrastive particles might also be sensitive to referent shift. If the particles are shift markers, they will only associate with the actor of an event if the actor of the previous event was different. That is, if the second actor carries out a brief intervening event before carrying out the target event, there will not be contrastive or additive particles associated with this actor in the clause in which the target event is described.

6. There may be a difference in the use of additive and contrastive particles based on whether the events described occur simultaneously or in sequence. I do not have evidence that supports a hypothesis with regard to this question. However, I expect identical events to be less frequently described using the additive particle when they occur simultaneously, because in these cases speakers will be more likely to simply use plural marking (i.e. *the man and the woman sat down* instead of *the man sat down and the woman, too, sat down*).

In the remainder of this chapter, I will describe the research method (Section 7.2), present the results (Section 7.3) and discuss the implications of my findings (Section 7.4).

Table 7.1: Elicitation stimuli: event pairs.

event pair	actions	objects
sit down - sit down	identical	-
write - write	identical	identical
cut onion - cut tomato	identical	different
read big book - read small book	identical	opposite size
walk - run	similar	-
throw ball - kick ball	similar	identical
eat rice - drink water	similar	different
put big bag on back - small bag on head	similar	opposite size
stand up - lie down	opposite	-
take off hat - put on hat	opposite	identical
put on coat - take off shoe	opposite	different
blow out big candle - light small candle	opposite	opposite size
jump - yawn	unrelated	-
make phone call - sweep floor	unrelated	different

7.2 Method

7.2.1 Materials

The materials consist of a set of video clips showing 14 pairs of events. Within an event pair, one actor performs one event and another actor performs the other event. The actors within a pair are usually of different genders, to make it easier for participants to refer to them. Each pair of events was recorded with a different pair of actors. The pairs of events were selected to be identical, similar, different or opposite. Similar events were selected to have main components in common and differ only in minor aspects such as manner or the object involved. Opposite events consist of the doing and undoing of an action. Unrelated events have no elements in common. Table 7.1 gives an overview of the event pairs used and how they were classified in terms of similarity or opposition.

Each pair of events was recorded in four different temporal arrangements: sequential, simultaneous, separate and intervening. The same actors were used for each of the four varieties of an event pair. Descriptions of the pairs can be seen in Table 7.2.[1]

The sequential arrangement functions as the baseline to compare the

[1]The videos for the separate arrangement were created from the videos recorded for the simultaneous arrangement. Each of the simultaneous videos was cropped twice: once so that only the actor on the left is shown and once so that only the actor on the right is shown.

Table 7.2: Elicitation stimuli: temporal arrangements.

arrangement	description
sequential	The events take place within one video, one after the other.
simultaneous	The events take place within one video, simultaneously.
separate	The events take place in two separate videos, one actor in each, played sequentially.
intervening	The events take place in two videos, one of the first actor performing the first event alone, the second of the second actor joining the first, sitting down or waving and then performing the second event.

other arrangements to. The simultaneous arrangement is used to see if the temporal structure of the events is related to the use of the particles. The separate arrangement is used to see if set-membership is important for the use of the particles: when the events are separated, the viewer will be less likely to conceptualize the two actors as a set. The intervening arrangement is used to see if the particles are used as shift markers. If they are, they should not be used in the description of events in this arrangement, as the second actor is introduced just before performing the second event.

7.2.2 Procedure

The materials described above were used for three very similar experiments. The setup of the first experiment was as follows. Participants watched pairs of video clips, on a split screen. The first video appears on the left half of the screen, then the screen turns black and then the second video appears on the right half of the screen.

As described in the previous section, event pairs in temporal arrangements 'separate' and 'intervening' consist of two subsequent video clips. In the other two temporal arrangements, both events take place within one video clip, but to make the procedure equal for all conditions, a second video was added to these. This consisted of a static shot of the actors before they start their events, which was played before the target clip. This also had the advantage of eliminating all discussion of the background (what the people and the surroundings look like) from the target clip.

Participants were asked to narrate what they saw in each of the video clips to an Avatime listener. They described the first video of each pair before the second video was shown. They were told that the clips would be presented in pairs and the clip on the left and the right side of the screen belonged

together. All instructions were given in Avatime. Speakers had unlimited time to reply and if they did not see the video well they could ask to watch it again. After they finished describing a video, the researcher pressed the button to play the next one. Listeners were never able to see the video clips that were being played. They were instructed to pay attention and ask questions if there was something they did not understand. The listener was usually somebody who had already been a participant in the experiment, however, the participant was never somebody who had already been a listener. Most of the time, the listeners did not say much during the experiment, but in a few cases they actively asked questions about the things they were told.

The stimuli were balanced across four lists, with one version of every event pair in each list and all different temporal arrangements in each list. This way a single participant never saw multiple versions of the same event pair and each participant got to see all four temporal arrangements. Pairs of clips within a session occurred in a different random order for every participant. Each session started off with two practice pairs and included 9 filler pairs. Filler pairs all included two actors, like the stimuli, but in the filler pairs, instead of performing events in parallel, the two actors interacted with each other (for instance, a person giving something to another person, two people putting up the laundry, two people cooking). All responses were audio-recorded for later transcription.

The procedure of the second experiment was similar to the first. Participants watched the same video clips, but this time only temporal arrangements 'sequential' and 'simultaneous' were included. As the event pairs in these temporal arrangements can be shown in a single video clip each, the setup with the split screen was abandoned and the video clips were displayed in the center of the screen. The advantage of this setup was that it simplified the experiment and that the size of each clip on the screen was larger, which made it easier for participants to see what was happening (in the first experiment, participants sometimes had to sit very close to the screen to see the events clearly). A possible disadvantage was that there was now no initial background clip, which made people freer to include background descriptions in between the target material. For instance, they could say something like 'there was a woman and she jumped, there was a man and he yawned' instead of first presenting the set of two people and then contrasting their activities. However, the data shows that people tended to provide the kinds of descriptions the videos were intended to elicit, despite the possibility for introducing in-between background material. Each session started with one practice video and included 10 filler videos. Videos were presented in a different random order for each participant.

The third experiment included only temporal arrangements 'sequential' and 'separate'. This time, one group of participants saw all event pairs in the 'sequential' arrangement and another group saw all event pairs in the 'separate' arrangement. Instead of the setup with two video clips next to each other, the two separate clips of condition 'separate' were played in sequence within the same space of the screen, without a pause in between. Participants described what they saw after seeing both clips. The reason for this change was to ensure a more natural flow of discourse, not broken up by playing a video clip in between the descriptions of the first and second events. Each session started with two practice videos and included 10 filler videos. Videos were presented in a random order for each participant.

7.2.3 Participants

In experiment 1, 42 participants were tested. As there seems to be a correlation between age and particle use, with older people using more particles, five participants were excluded in order to keep the age distribution of the four groups similar. One more participant was excluded because of insufficient command of Avatime, leaving 36 participants, 9 in each experimental group. Ages range from 12 to 69 (mean 24.9).

For experiment 2, data from 14 participants was included, 7 in each experimental group. Two more participants were tested but excluded to maintain the age balance between the groups. Ages range from 12 to 59 (mean 21.4).

For experiment 3, data from 30 participants was included, 15 in each experimental group. Two more participants were tested but excluded because they were unable to do the task. The age distributions of the two groups were similar; ages range from 15 to 76 (mean 43.6).

Participants who had already taken part in one of the experiments could not take part in another experiment.

All participants were native speakers of Avatime. All participants spoke Ewe (another Kwa language and the lingua franca of the area) in addition to Avatime and many also spoke English. Several participants also spoke other Ghanaian languages such as Twi and Ga (also Kwa languages). Most participants came from Vane, but there were also some participants who (originally) came from the villages of Amedzofe, Biakpa, Dzogbefeme and Dzokpe. All participants were currently living within the Avatime traditional area. Some participants came from places outside of the Avatime traditional area, but grew up speaking Avatime with at least one parent.

7.3 Results

7.3.1 Overall responses

The three experiments taken together elicited a total of 1120 descriptions of event pairs. The descriptions of the second event of a pair were annotated for whether or not an additive or contrastive particle modified the actor. Particles elsewhere in the description were not taken into account. If the event pair was described as intended by the researcher, but no particle was used, the label 'no particle' was applied. When identical event pairs were described in a single clause conjoining the two actors (e.g. 'the woman and the man sat down', see (4)), the description was labeled 'single clause'. Descriptions were tagged as incomplete if one or more relevant parts of the events were not described or described differently than intended. This includes descriptions where one entire event was missed, or for instance generalizations such as 'they are playing' instead of a description of each individual event.

As I showed in Table 7.1, I manipulated both the actions and the objects that were acted upon. Objects could be either absent, identical, different or opposite in size. This manipulation did not lead to differences in results, because the majority of participants either ignored the difference between the objects (i.e. instead of saying 'he cut an onion and she cut a tomato', both people would be described as cutting 'something' or 'a fruit') or described this difference in a separate clause before or after describing the actions. In the case of the event pairs with identical actions, this led to a problem: people who did describe the objects would treat these event pairs as different while people who did not describe the objects would treat them as identical. Because of this, these event pairs ('cut onion/cut tomato' and 'read big book/read small book') were removed from the data. The event pair 'stand up/lie down' was also removed because it did not elicit the intended description.

After removing these pairs, a total of 880 descriptions of event pairs remain. An overview of the number of particles used (associating with the actor of the second event) can be seen in Table 7.3.

In the presentation of the results, the four contrast markers are grouped together and so are the two additive particles. As described in Chapter 5, there does not seem to be a difference in meaning between the different contrastive particles. In the results of the experiment, no differences between the particles emerged. As described in Chapter 6, the particle *fɛ* is not used in the Vane dialect and is therefore rare in my data. This is also reflected in the results presented here, which include only three cases of *fɛ*. I cannot be sure

Table 7.3: The number of additive and contrastive particles used in the three experiments.

description	count
particle: *tsyɛ*	168
particle: *fɛ*	3
additive particles, total	**171**
particle: *xunyɔ*	29
particle: *pɔ̀*	25
particle: *kɔ*	16
contrastive pronoun	4
contrast markers, total	**74**
no particle: single clause	37
no particle: other	455
no particle, total	**492**
contrastive + additive	4
incomplete description	139
total	**880**

whether grouping the two additive particles together is justified, as I do not have enough data to be sure that they have the same meaning. However, this is not very important, as leaving out the three cases of *fɛ* would not significantly change the results.

Perhaps the most striking number in Table 7.3 is the total of 492 cases in which no particle is used, which is more than half of all cases. Part of the explanation for this is that out of the four temporal arrangements, two resulted in few particles, as expected. However, even in the conditions that were expected to be most favorable to the particles, fewer particles than expected were used. I will come back to this in Section 7.4.

Lin 3 of example (1) shows the use of the additive particle *tsyɛ* and line 3 of example (2) shows the use of the contrastive particle *xunyɔ*.

(1) 1 *ɔ́-dzɛ* *nì* *ó-nyime* *ba-dí* *ke-se-à* *lɛ̌*
C_{1s}-woman and C_{1s}-man C_{1p}.SBJ-sit:LOC C_{6s}-ground-DEF and
ó-nyime *e-vù* *kị-mịmị-ɛ́* *ka-wla* *mɛ̀*
C_{1s}-man C_{1s}.SBJ-hold C_{4s}-rice-DEF:LOC C_{6s}-hand inside
'A woman and a man are sitting down and the man is holding rice.'

2 *lɛ̌ ɔ́-dzɛ a-ŋwɛ̀ kù̩-da*
and C_{1s}-woman C_{1s}.SBJ-drink C_{5s}-drink
'And the woman drank a drink,'

3 *lɛ̌ ó-nyime* ***tsyɛ*** *á-ŋa dɔ̀mɛ*
and C_{1s}-man **ADD** C_{1s}.SBJ-eat thing
'and the man (*tsyɛ*) ate something.' (contrexp07_s4_120831)

(2) 1 *ɔ́-dzɛ nì ó-nyime bá-lɛ*
C_{1s}-woman and C_{1s}-man C_{1p}.SBJ-stand
'A woman and a man were standing.'

2 *ɔ́-dzɛ a-yɔ li-xwi-lè*
C_{1s}-woman C_{1s}.SBJ-jump C_{3s}-jump-DEF
'The woman jumped,'

3 *pɔ̀ ó-nyime* ***xunyɔ*** *èɛ́-yaka*
but C_{1s}-man CTR3 C_{1s}.SBJ.PROG-yawn
'but the man (*xunyɔ*) was yawning.' (contrexpsg14_2-1_120920)

These are both relatively brief responses; however, there was much variation in the length of the descriptions.

Example (3) shows a response in which no particle is used in the description of the second event. This example has the same structure as the examples above in which particles were used: after a description of the background, the two events are described in adjacent clauses.

(3) 1 *ó-nyime=étɔ nì ɔ-dzɛ=étɔ be-vù bɔl-yɛ ní*
C_{1s}-man=INDF and C_{1s}-woman=INDF C_{1p}.SBJ-hold ball-DEF LOC
a-wla-là
C_{3p}-hand-DEF
'A man and a woman were holding balls in their hands'

2 *ńte mè sì̩ ɔ́-dzɛ a-ŋwyà bɔ́l-yɛ tʉbe*
like.this inside COMP C_{1s}-woman C_{1s}.SBJ-throw ball-DEF away
'So the woman threw the ball away.'

3 *lɛ̌ ó-nyime a-ta bɔ́l-yɛ ní ɔ̀-klì̩-lɔ̀=ɛ*
and C_{1s}-man C_{1s}.SBJ-hit ball-DEF LOC C_{2s}-leg-DEF=CM
'And the man kicked the ball with his leg.' (expnew14_s2_130811)

A subset of responses without particle were monoclausal descriptions, an example of which can be seen in (4).

(4) *ɔ́-dzɛ* *nì* *ó-nyime* *ba-dí* *ke-se-à*
C_{1s}-woman and C_{1s}-man C_{1p}.SBJ-sit:LOC C_{6s}-ground-DEF
'The woman and the man sat down.' (contrexp05_s2_120831)

In the remainder of this section, I will discuss the results of the experiments, comparing the proportions of particles used in the different temporal arrangements and event pairs.

7.3.2 Comparisons

For a comparison of the effect of the different types of event pairs and different temporal arrangements on the use of the particles, I put the data from the three experiments together. Within this data set, I looked into the effect of two factors: (i) the type of event pair, which can be identical, similar, opposite or unrelated; and (ii) the temporal arrangement, which can be sequential, simultaneous, separate as presented in experiment 1, separate as presented in experiment 3 (see Section 7.2.2), and intervening. I studied the effect of these factors on the use of the additive and contrastive particles separately.

Table 7.4 shows the proportions of additive particles in the different conditions. The additive particle is used most frequently in the description of identical event pairs in the sequential temporal arrangement (77% of the time). In general, the identical event pairs clearly yield most additive particles, except in the simultaneous temporal arrangement. Out of the temporal arrangements, the sequential arrangement yields the highest proportion of additive particles.

Table 7.4: The proportion of responses that include an **additive particle** for different combinations of conditions. Rows indicate the type of event pair and columns indicate the temporal arrangements: sequential, simultaneous, separate as presented in experiment 1, separate as presented in experiment 3 and intervening.

	sequen.	simult.	separ.1	separ.3	interv.	*total*
identical	**0.77**	0	**0.50**	**0.71**	**0.24**	*0.51*
similar	**0.38**	0.08	0.08	0.12	0.04	*0.20*
opposite	0.14	0.15	0	0.10	0.05	*0.12*
unrelated	**0.25**	0.10	0.06	0.09	0	*0.14*
total	*0.37*	*0.08*	*0.15*	*0.24*	*0.08*	*0.24*

Table 7.5: The proportion of responses that include a **contrastive particle** for different combinations of conditions. Rows indicate the type of event pair and columns indicate the temporal arrangements: sequential, simultaneous, separate as presented in experiment 1, separate as presented in experiment 3 and intervening.

	sequen.	simult.	separ.1	separ.3	interv.	*total*
identical	0	0	0	0.04	0	*0.01*
similar	**0.19**	**0.22**	0.06	0.14	0.04	*0.15*
opposite	0.11	0.15	0	0.14	0.05	*0.10*
unrelated	0.13	0.10	0	**0.30**	0	*0.13*
total	*0.12*	*0.13*	*0.02*	*0.15*	*0.03*	*0.11*

Table 7.5 shows the proportions of contrastive particles in the different conditions. Contrastive particles are very rarely used to describe identical event pairs. They are also rare in the intervening temporal arrangement and in the separate temporal arrangement as presented in experiment 1. The particles are most frequent in the unrelated events presented separately in experiment 3 (30%). However, overall, there do not seem to be clear differences between the similar, opposite and unrelated events pairs.

Figures 7.1 and 7.2 show the proportions of additive and contrasive particles that were used for the description of each of the individual event pairs, summarized over all temporal arrangements. These figures show that there are large differences within the groups of similar, opposite and unrelated event pairs. With respect to the use of the additive particle, the unrelated event pairs stand out as being very dissimilar. The event pair *eat/drink* also stands out, yielding many more additive particles than the other similar pairs. With respect to the contrastive particles, the pairs *walk/run*, *throw/kick*, *hat on/hat off* and *jump/yawn* seem to yield more contrastive particles than the other pairs. These event pairs were categorized as belonging to three different types (similar, opposite and unrelated).

Figure 7.3 summarizes the overall proportions of additive and contrastive particles in the different temporal arrangements.

To investigate the effect of the two factors *type of event pair* and *temporal arrangement* on the use of the additive particle, I fitted a mixed-effects logistic regression model to the data with addive particle as the response variable, the type of event pair and temporal arrangement as fixed factors and speaker and item as random factors. With respect to the type of event pair, the model shows that the additive particle is used significantly more frequently in the description of identical event pairs than in the description of similar ($\beta = 1.98$, $z = 5.9$, $p < .0001$), opposite ($\beta = 2.69$, $z = 6.8$, $p < .0001$),

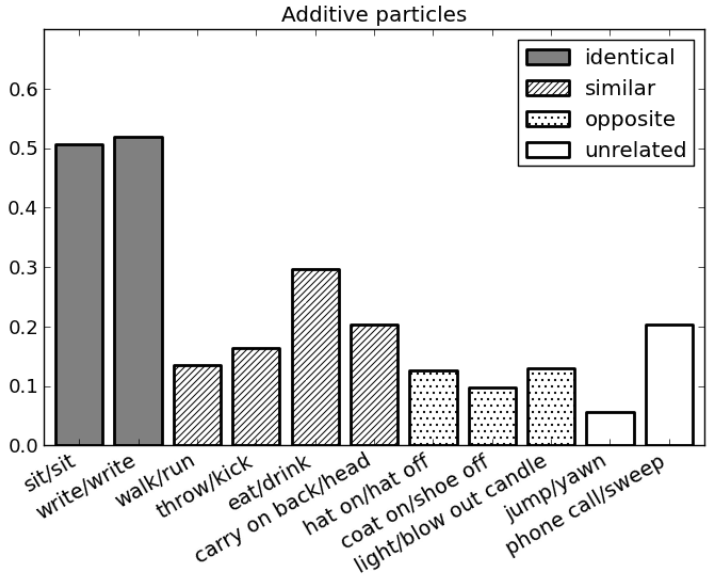

Figure 7.1: Proportion of descriptions of the different types of event pairs in which an additive particle was used (in all temporal arrangements).

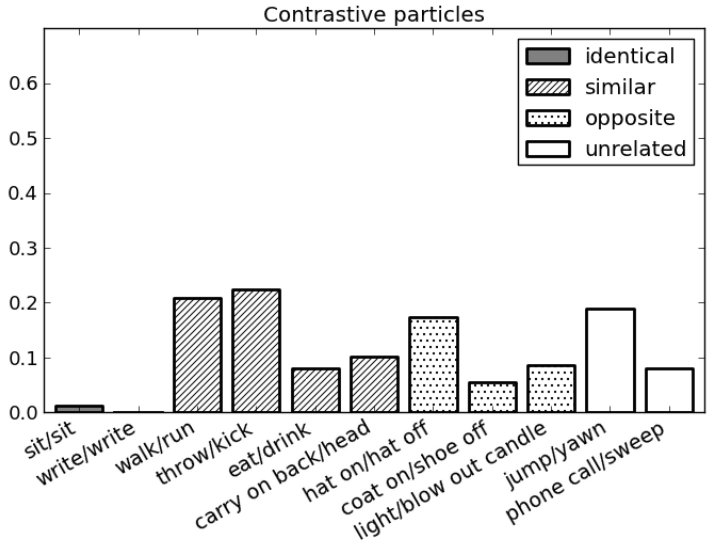

Figure 7.2: Proportion of descriptions of the different types of event pairs in which a contrastive particle was used (in all temporal arrangements).

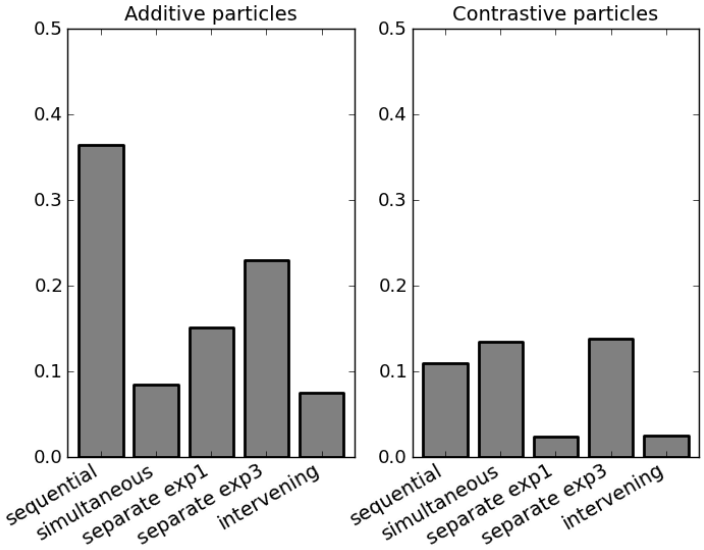

Figure 7.3: Proportion of additive and contrastive particles in the different temporal arrangements.

and unrelated ($\beta = 2.49$, $z = 5.9$, $p < .0001$) event pairs. The additive particle is also used significantly more frequently in the description of similar event pairs than in the description of opposite event pairs ($\beta = 0.71$, $z = 2.0$, $p < .05$). The additive particle is not used significantly more or less frequently in the description of unrelated event pairs than in the description of similar event pairs ($\beta =$ -0.51, $z =$ -1.3, $p = .19$) or opposite event pairs ($\beta = 0.20$, $z = 0.5$, $p = .65$).

With respect to the temporal arrangements, the model shows that the additive particle is used significantly more frequently in the description of sequential events that directly follow each other than when the two events occur simultaneously ($\beta = 2.25$, $z = 5.9$, $p < .0001$) or when there is an intervening event between the two main events ($\beta = 2.41$, $z = 4.6$, $p < .0001$). The additive particle is also used more frequently in the description of sequential events within one video clip than in the description of events that occur in separate clips. This is true both when the descriptions of the separate clips are given immediately after each clip as in experiment 1 ($\beta = 1.40$, $z = 3.6$, $p < .001$) and when the descriptions of the separate clips are given after both clips have been played, as in experiment 3 ($\beta = 0.81$, $z = 2.3$, $p < .05$).

The model shows no interaction between the type of event pair and the temporal arrangement.

As the significant difference between the proportions of additive particles in the sequential and simultaneous arrangements could be due to the identical events only, which are described using single clauses in the simultaneous arrangement and therefore do not yield any additive particles, another comparison was made for the non-identical events only (similar, opposite and unrelated). I fitted a mixed-effects logistic regression model to the data for the non-identical event pairs, again with addive particle as the response variable, the type of event pair and temporal arrangement as fixed factors and speaker and item as random factors. The proportion of additive particles in descriptions of the sequential event pairs is still significantly higher than that in the descriptions of simultaneous event pairs ($\beta = 1.04$, $z = 2.7$, $p < .01$).

To look for the effect of the type of event pair and temporal arrangement on the use of contrastive particles, I fitted a mixed-effects logistic regression model to the data with contrastive particle as the response variable, the type of event pair and temporal arrangement as fixed factors and speaker and item as random factors.

The model shows that compared to identical events, contrastive particles are used significantly more frequently in similar events ($\beta = 3.98$, $z = 3.0$, $p < .01$), opposite events ($\beta = 3.37$, $z = 2.5$, $p < .05$) and unrelated events ($\beta = 3.74$, $z = 2{,}7$, $p < .01$). The difference between the opposite and similar events pairs is not statistically significant ($\beta = -0.61$, $z = -1.2$, $p = .25$) and neither is the difference between the unrelated and the similar event pairs ($\beta = -0.24$, $z = -0.4$, $p = .68$) or the difference between the unrelated and opposite event pairs ($\beta = 0.37$, $z = 0.6$, $p = .56$).

With respect to temporal arrangements, the model shows that significantly more contrastive particles are used in the sequential arrangement, where the two events directly follow each other within one video clip, than when there is an intervening event between the two main events ($\beta = 1.84$, $z = 2.0$, $p < .05$) or when the two events occur in separate clips and are described immediately after viewing as in experiment 1 ($\beta = 2.22$, $z = 2.5$, $p < .05$). The sequential temporal arrangement does not yield more or fewer contrastive particles than the separate arrangement as presented in experiment 3 ($\beta = 0.28$, $z = 0.5$, $p = .65$). There is also no significant difference between the sequential and simultaneous event pairs with respect to the use of contrastive particles ($\beta = 0.18$, $z = 0.4$, $p = .66$).

7.4 Discussion

7.4.1 Event pairs

In Section 6.3.2 I suggested that the additive particle is used to indicate that events 'go together', i.e. uncontroversially co-occur or follow each other. I claimed that identical events inherently go together and will thus frequently or always be marked with the additive particle. I suggested that the additive particle can also be used with similar events, which do not inherently 'go together', to emphasize their similarity and background the differences between them. Based on this analysis, I hypothesized that identical event pairs will be described with the additive particle more often than non-identical event pairs and might even obligatorily be described with the additive particle. I also hypothesized that similar event pairs will be described with the additive particle more often than event pairs that are unrelated or opposite.

The first prediction was borne out; the proportion of additive particles in the event pairs 'sit/sit' and 'write/write' is significantly higher than that in the similar, opposite and unrelated event pairs. The additive particle is used frequently, but it is not obligatory. In the sequential temporal arrangement, with the highest number of additive particles, 77% of the descriptions of identical event pairs was marked with the particle. In other temporal arrangements, the proportion of additive particles was lower.

The second hypothesis was partly borne out. The similar event pairs yield more additive particles than both the opposite event pairs and the unrelated event pairs, however, the difference with the unrelated event pairs is not statistically significant. Moreover, the two unrelated event pairs behaved very differently: one (*jump/yawn*) was very rarely described using the additive particle whereas the other (*phone call/sweep*) yielded as many additive particles as some of the similar event pairs. Within the similar event pairs, there is one pair (*eat/drink*) that was described much more often using the additive particle than the others, whereas two similar event pairs, *walk/run* and *throw/kick*, yield proportions of additive particles close to that of the opposite pairs (see Figure 7.1 in the previous section). These results seem to indicate that similarity in the sense of sharing semantic features is not exactly what the particles are sensitive to.

The results seem to be better explained by a different factor: the likelihood of the co-occurrence of the events. This is in line with my account of the particle as indicating that events 'go together'. The pair *eat/drink* could be argued to elicit so many additive particles because eating and drinking are activities that occur together in real life very frequently. Making a phone call

and sweeping the floor are both ordinary everyday activities that could easily co-occur. The fact that they are semantically unrelated may be less important for the use of the additive particle than their real-world compatibility. The event pairs that elicit very few additive particles seem to be pairs of events that are not very likely to co-occur or follow each other. It is not clear, for instance, why one person would put on a coat and the other would take off a shoe or why somebody would jump into the air and another person would yawn. This leads to an interesting hypothesis for further research: perhaps if there is more context to provide an explanation for the co-occurrence of seemingly opposite or unrelated events pairs, more additive particles will be used to describe them.

The contrastive particles were analyzed in Section 5.3.3 as indicating that there is an opposition between two predicates or propositions. This means one either directly negates the other or they are related members of a set that exclude each other in the context. Based on this analysis, I predicted that the contrastive particles would not or very rarely be used in the description of identical event pairs. I also thought it might be the case that event pairs that are more prototypically opposite (e.g. doing and undoing of an action) elicit more contrastive particles than similar or unrelated events. Finally, I expected events pairs that clearly form a set to yield more contrastive particles than event pairs that do not.

The first hypothesis was confirmed: identical events were almost never described with contrastive particles. The second and third hypotheses were not confirmed. Opposite event pairs did not yield more particles than similar or unrelated event pairs. Unrelated event pairs were expected not to form a set, whereas similar and opposite event pairs form sets. One of the unrelated event pairs, *phone call/sweep* behaved as expected and yielded only one contrastive particle. However, the other unrelated pair, *jump/yawn* was described with contrastive particles relatively frequently. A possible reason for this is that jumping and yawning, even though the events themselves are unrelated, could imply an opposition, as jumping implies activeness and yawning tiredness. In further research, it would be useful to test more unrelated event pairs. As the number of contrastive particles used is quite low overall, it is also possible that clearer differences between the event pairs will emerge if more data is collected.

An important observation from the results is that both the additive particle and the contrastive particles can be used to describe almost all event pairs. This shows that the particles are not simply selected by the context, as is for instance suggested by Zeevat (2004) for discourse particles in Germanic languages. Rather, which particle is used often depends on how the

speaker wants to represent the event. As most event pairs can be viewed both as going together and as opposite, there is usually a choice between the particles. In this light, it is interesting to look at an example of the use of both a contrastive and an additive particle within one description (5). Here, the speaker initially uses *pɔ̀*, probably as she was planning to highlight the contrast between walking and running, but then uses *tsyɛ* to indicate the similarity and highlight the fact that both people passed by.

(5) 1 *níyà=ɛ* *yɛ̀fɔna* *ɔ-kàtsì-e* *a-gà* *lɛ̌*
here=CM white.person C_{1s}-old.man-DEF C_{1s}.SBJ-walk and
a-za=ɛ
C_{1s}.SBJ-pass=CM
'Here, an old white man walked and passed by.'

2 *o-bi-è* ***pɔ̀=ɛ*** *yɛ* ***tsyɛ*** *e-se* *lɛ̌*
C_{1s}-child-DEF CTR2=CM C_{1s} ADD C_{1s}.SBJ-run and
a-za=ɛ
C_{1s}.SBJ-pass=CM
'As for the child, he (*tsyɛ*) ran and passed by.'

(expnew03_s1_130805)

Another interesting observation is that overall, the additive particle is used much more frequently than the contrastive particles. In identical event pairs, the additive particle occurs very frequently; there are no event pairs in which contrastive particles occur in such high proportions. Even in the non-identical event pairs, the additive particle is almost twice as frequent as the contrastive ones (a count of 66 versus 36). A possible explanation is that contrastive particles are more emphatic. The setup used for this experiment does not require participants to emphasize the contrast, as they are simply asked to describe what they see. A follow up study could test whether the contrastive particles are used more when there is more need to emphasize the contrast. This could be done by changing the task to engage the participants more, for instance by embedding the event pairs in a story or by using a director-matcher paradigm.

7.4.2 Temporal arrangement

With respect to the temporal arrangement of the events, I had three research questions. The first was whether the particles evoke alternatives that form a set with the marked element. In my analysis of the meaning of the additive particle, I mentioned indicating the presence of a contextually relevant alternative as part of its meaning (Section 6.3.2). The contrastive particles also evoke alternatives most of the time but do not necessarily do so (see

Section 5.3.3). Because of this, I hypothesized that more additive and contrastive particles would be used in the description of event pairs in which the actors are more likely to be conceptualized as a set. In the sequential temporal arrangement, the actors clearly form a set, but in the separate temporal arrangement, they do not appear on the screen together. Because of this, I expected more contrastive and additive particles in the sequential temporal arrangement than in the separate temporal arrangement.

This hypothesis was partly confirmed. There are more additive particles in the sequential arrangement than in the separate arrangements, both as presented in experiment 1 and as presented in experiment 3. Experiment 3 was carried out to see if the lack of additive particles in the separate arrangement was not due to the fact that participants were asked to describe the first event before they saw the second event, a procedure that breaks up the discourse. In experiment 3, participants saw both events before being asked to describe them. The data shows that even though the procedure in experiment 3 seems to lead to more additive particles than that in experiment 1, the proportion of additive particles used in this arrangement is still significantly lower than that used in the sequential arrangement. This seems to indicate that the additive particle is indeed used more when the two actors are can easily be conceptualized as a set.

The number of contrastive particles is significantly higher in the sequential arrangement than in the separate arrangement in experiment 1, but there is no significant difference with the separate arrangement in experiment 3. This seems to indicate that in the case of the contrastive particles, the difference in experiment 1 is mostly due to the breaking up of the discourse and the particles are not sensitive to set-membership. This is in line with the finding in the corpus study that contrastive particles do not always evoke an alternative to the contrast-marked element (see Section 5.3.4). However, one may also wonder if the comparison between the sequential and separate arrangements really targets set-membership only or whether there are other differences between the two arrangements. The separate arrangement is certainly less naturalistic, as the first actor suddenly disappears and the second actor appears. People sometimes mention this appearing and disappearing in their description of the events, which causes intervening descriptions in between the target events. In a follow-up study, it could be useful to make the two conditions more comparable, with presentation of the actors as a set or not as the only difference.

The second research question related to the temporal arrangements is whether referent shift plays a role in the use of the particles. This was based on the finding discussed in Section 6.4.2 that in some cases it seems like the

additive particle is used as a marker of referent shift. Especially when there does not seem to be similarity or compatibility between the two events, an explanation for the use of the particle could be that it is used to mark referent shift. One could, for instance, argue that when people mark the event pair *phone call/sweep* with the additive particle, all they do is indicate that the subject of the second clause (sweep the floor) is different from the subject of the previous clause. Based on the findings for the event pairs, this explanation already seems unlikely, because it does not explain the differences between the event pairs: why would some types of event pair be marked for referent shift more often than others? Another way to look into referent shift is to look at the results for the 'intervening' temporal arrangement.

In the 'intervening' temporal arrangement, the second actor is introduced (i.e. 'a woman came in and sat down'), before he/she performs the second event. This means that when the second event takes place, there is no referent shift. As expected, this temporal arrangement elicited significantly fewer additive particles than the sequential (no intervening event) arrangement. This could be an indication that the particle marks referent shift, but it could also simply mean that the particle is preferred when the two connected clauses are adjacent. More telling are the cases in which the additive particle is used despite the intervening event. These are six cases altogether. Four of these are descriptions of identical event pairs. One is a description of the pair *eat/drink* and one a description of the pair *coat on/shoe off*. The latter can be seen in example (6). The pronoun marked by the additive particle *tsyɛ* refers to the woman who was the subject of the previous clause. The additive particle does not mark a shift of referent.

(6) 1 *ɔ́-dzɛ-ɛ* *a-kpɛ* *lì-wù-le*
C_{1s}-woman-DEF C_{1s}.SBJ-wear C_{3s}-piece.of.clothing-DEF
'The woman put on the coat.'

2 *ɔ́-dzɛ* *to-le* *a-bá-panì=yɛ*
C_{1s}-woman C_{1s}-one C_{1s}.SBJ-VEN-greet=C_{1s}.OBJ
'One woman$_i$ came and greeted her,'

3 *kò* *yɛ* ***tsyɛ*** *e-bu* *àfɔ̀kpa* *vù*
just C_{1s} **ADD** C_{1s}.SBJ-remove shoe hold
'then she$_i$ (*tsyɛ*) took off her shoe.' (contrexp40_s4_120914)

The final question I had with respect to the temporal arrangements is whether additive and contrastive particles are more likely to occur when events happen in sequence or when they happen simultaneously. More particles were used to describe sequential events than to describe simultaneous events. A reason for this could be the lack of additive particles in the identi-

cal simultaneous events. These event pairs were expected to elicit few or no additive particles, as they can more easily be described using monoclausal descriptions (see hypothesis 6 in Section 7.1 and example 4 in Section 7.3.1). However, the data shows that the additive particle was still more frequent in the sequential temporal arrangement when only the similar, opposite and unrelated event pairs were taken into account. My account of the meaning of the additive particle does not provide an explanation for this finding. Perhaps most of the events in the stimuli are more likely to occur in sequence than simultaneously. Further research using more event pairs can shed light on this. The proportions of contrastive particles are similar in both arrangements. Whether this is because there are so few contrastive particles overall or whether contrastive particles are not sensitive to the difference between sequential and simultaneous is also a question for further research.

7.4.3 Conclusion

The findings in this chapter have shed more light on the analyses of the contrastive and additive particles that I suggested in Chapters 5 and 6 respectively. In some cases, they have provided converging evidence, strengthening the previously made analyses. In other cases, they have provided new information on the use of the particles, that would have been difficult to find in a corpus study. In yet other cases, they have raised interesting questions for follow-up experiments.

In Chapter 5, I analyzed the contrastive particles as indicating that there is an opposition between two predicates or propositions. The particles also often, but not necessarily, indicate that there is a contextually relevant alternative to the element they associate with. The findings in the current chapter seem to confirm the analysis of the contrastive particle as marking an opposition, as all but the identical event pairs could be described with a contrastive particle. However, it is not yet clear to what extent unrelated events can be described using contrastive particles. No evidence was found to confirm that the contrastive particles evoke a contextually relevant alternative. This could be due to the infrequent occurrence of the particles in the responses.

The infrequent use of contrastive particles makes clear that they are not obligatory in the description of contrastive situations. It could be that they are emphatic and that the experimental context did not provide enough incentive for the participants to emphasize the contrast.

In Chapter 6, I analyzed the additive particle as indicating that there is an alternative to the added constituent and that the events in which the added constituent and the alternative take part ‘go together’, i.e. uncontroversially

co-occur or follow each other. I found that the particles were mostly used with events that are identical, similar or in a stereotypical relation. The particles were used most frequently with identical events, suggesting they might be obligatory in these cases.

In the experiment, I looked at whether identity and similarity, in the sense of sharing semantic features, played a role in the use of the additive particle. Identity clearly had an effect. Identical event pairs were described using the additive particle much more frequently than any other type of event pair. However, the additive particle was not obligatory in the context of identical events. Similarity plays a smaller role. Similar events were described using the additive particle more frequently than opposite events, but one of the unrelated events yielded as many additive particles as the similar events. What seems to play a larger role is whether two events typically co-occur. This supports the unified hypothesis of the particles as 'going together' and shows that the particle cannot be analyzed as having as one of its functions 'marking similarity'.

In the case of the additive particle, unlike the contrastive particles, I did find evidence that it was used more frequently when it was easier to conceptualize the actors of the two events as set members.

An important finding is that most event pairs can be described both with additive and with contrastive particles. This indicates that the particles are not directly conditioned by discourse context. There is no one-to-one relation between context and particles. The fact that in some situations, certain particles are more likely to occur is because these situations are more likely to be viewed as going together or as opposite. The relation between context and particle use is thus mediated by the perception and intention of the speaker. The additive and contrastive particles are best seen as devices used to highlight the particular relation between events that the speaker wants to convey.

As this was an exploratory experiment, more research into the use of the particles is needed to strengthen and expand the findings reported here. Several promising avenues for further research have emerged. First, it would be interesting to carry out a task in which the event pairs are embedded in a slightly more elaborate discourse context. I hypothesized that the likelihood of two events co-occurring may play a role in the use of the additive particle. This likelihood could be manipulated by varying the discourse context. A more elaborate context may also lead to more engagement on the part of the participant and thereby to a more frequent use of contrastive particles. Second, a larger range of event pairs needs to be studied, especially a larger range of unrelated event pairs. These are of interest for the additive particle

as they can show to what extent an interpretation of ‘going together’ can be forced upon events that are different. They are also of interest for the contrastive particles, as they can provide evidence for the analysis of these particles as marking that two events are mutually exclusive members of a set. A third aspect that can be explored further is the role of intervening events and whether or not the actors are conceptualized as a set. These two factors are difficult to tease a part in the current experiment. In future research they could be controlled for separately. If the event pairs are embedded in a more elaborate context, for instance in a narrative, the individual events could be separated by more intervening narrative and that would also make it easier to manipulate whether or not the actors are conceptualized as set members.

CHAPTER 8

Conclusions

This thesis started out with the following aims: (i) to describe the syntactic properties and functions of a number of information structure constructions and particles in Avatime, and (ii) to compare the functions of these constructions and particles to theoretical notions of information structure. In this Chapter, I will first summarize my findings with regard to the syntactic properties and functions of information structure markers (Section 8.1). I will then discuss the theoretical implications of these findings (Section 8.2). Finally, in Section 8.3, I will discuss some possible directions for future research.

8.1 Summary

Chapter 1 of this thesis introduced the research questions, theoretical notions of information structure, previous research on information structure in Kwa languages and the research methods. Chapter 2 contained a grammar sketch of Avatime.

Chapter 3 discussed the Avatime focus construction. Like other Kwa languages, Avatime has a focus construction that involves placing the focused element in clause-initial position and marking it with a focus marker. Most of the time, the focus-marked constituent coincides with the part of the sentence that is interpreted as being in focus. However, there are cases in which the part of the sentence understood as being in focus extends beyond the focus-marked constituent or is restricted to part of the focus-marked constituent. The focus construction is not obligatory: answers to content questions can remain unmarked for focus. Full-sentence answers to subject questions are likely to be focus-marked, whereas full-sentence answers to object questions are rarely focus-marked.

In my corpus of spontaneous discourse, focus marking is used mostly when the focus contradicts a presupposition, assumption, or expectation or when there is a specific alternative to the focus-marked element. Neither function can account for all cases. On a more general level, the focus construction can be analyzed as drawing attention to the element of the sentence that updates the common ground. The contrastive interpretation arises as an implication from the use of a marked construction.

Chapter 4 discussed left dislocation. Left dislocation is characterized by a constituent in sentence-initial position (preceding the subject and the focus-marked element if present), often but not necessarily a prosodic break following this constituent, and sometimes an element crossreferencing this constituent in the remainder of the sentence. Unlike left dislocation in English, left dislocation in Avatime cannot be defined based on the use of resumptive pronouns alone. This means that sentence-initial adjuncts and so-called Chinese-style topics also classify as left dislocation.

I showed that some types of subordinate clauses in Avatime can contain left dislocation. This means that left dislocated elements cannot be analyzed as orphans, separate fragments that are linked to the remainder of the sentence via discourse linking. In the framework of Role and Reference Grammar, left dislocated elements within subordinate clauses are not problematic, as they have their own position in the syntactic structure, preceding the clause but still within the sentence.

The function of left dislocation is highlighting a background element to indicate that it is important to keep in mind for processing of the upcoming discourse. This general function accounts for the two main uses of left dislocation: to introduce referents and to indicate set membership.

In chapter 5, three contrastive particles were discussed: *kɔ*, *xunyɔ* and *pɔ̀*, all three meaning something like ‘by contrast’. These particles most frequently associate with subjects and left dislocated elements. The particles *kɔ* and *xunyɔ* do not occur with focus-marked elements, but *pɔ̀* does. Another difference between the particles is that *xunyɔ* and *pɔ̀* can occur in sentence-final position whereas *kɔ* cannot.

I showed that a broad definition of contrast as evoking alternatives cannot account for the Avatime particles. Instead, a narrow notion is needed, which describes the particles as indicating an opposition. The three particles seem to have the same basic meaning: they indicate that there is a contextually relevant alternative proposition or predicate which does not hold true for the situation currently described. When the particles associate with an element of the sentence (do not occur sentence-finally), they evoke an alternative to the marked element. The alternative proposition or predicate holds true

with respect to this alternative. When the particles occur sentence-finally, the entire sentence is in opposition to the alternative proposition.

Chapter 6 investigated the meaning and use of the additive particle *tsyɛ*. This particle most frequently associates with in-situ subjects and left dislocated elements, but may also associate with objects, adjuncts, predicates and subordinate clauses. Unlike what has usually been claimed for additive particles in well-known European languages such as English and German, the Avatime additive particle does not necessarily associate with focused elements. The additive particle indicates that there is a contextually relevant alternative to the element it associates with. Unlike additive particles in English and German, the particle *tsyɛ* does not require the presupposition of identity between the events in which the added constituent and its alternative are involved. Instead, *tsyɛ* indicates that the two events uncontroversially co-occur or follow each other.

In chapter 7, I presented the results of an exploratory production experiment designed to investigate the use of the contrastive and additive particles in more detail. In this experiment, participants were asked to watch and describe video clips that show pairs of events.

The experiment provides further evidence for the analyses proposed for the additive and contrastive particles in the previous chapters. The additive particle was used very frequently (but not obligatorily) in the description of identical event pairs. The additive particle seemed to be used more frequently when two events are likely to co-occur. Semantic similarity between the two events did not seem to play a large role in the use of the additive particle. When there was an intervening event and/or when the two actors were less likely to be conceptualized as set members, the additive particle was used less frequently. Contrastive particles were used very infrequently but could be used to describe all event pairs except the identical ones. No differences were found between more and less prototypically opposite event pairs. An interesting finding was that the same event could be described using either an additive or a contrastive particle. This indicates that the particles are not conditioned by context but can be used strategically to reflect the speaker's point of view.

8.2 Theoretical implications

In this thesis, I have provided a detailed description of information structure markers in Avatime. I have mostly concentrated on investigating the functions and meanings of these information structure markers by studying how they are used in a corpus of spontaneous discourse and in various elicitation

tasks. Apart from providing a detailed description of information structure marking in an underdescribed language, the chapters in this thesis also raise theoretical issues. In this section, I will first discuss the interplay between contexts of use and meaning and then the relation between notions of information structure and the Avatime constructions and particles investigated.

8.2.1 Context and meaning

Several chapters of this thesis have provided examples of how the meaning of information structure markers is related to the contexts in which they are used. I have shown that information structure markers that seem to have multiple functions can be described as having a single more general meaning. In Chapter 3, I showed that the focus construction often indicates that there is a specific alternative to the focus-marked element and it also frequently indicates unexpectedness. Neither function can account for all cases, but the more general meaning of highlighting the main information update can. In Chapter 4, I showed that the two main functions of left dislocation, referent introduction and indicating set membership, can also be accounted for under a more general representation, in this case highlighting a background element that is important to keep in mind to interpret the remainder of the utterance. In Chapter 6, I showed that the additive particle occurs in three types of context and argued that these three interpretations reflect the same general meaning, which is that the added constituent and an alternative are involved in events that uncontroversially co-occur or follow each other.

An assumption often tacitly made in information structure research is that there is a one-to-one relation between context and meaning (see also Matić, 2009). In research on focus, for instance, certain contexts, particularly content questions, are thought to trigger focus marking. This is nicely captured in the following quote from Büring (2010, 178), also discussed by Matić & Wedgwood (2013): "I assume, with much of the literature, that we can identify focus via the pragmatics. Concretely, certain (semantic or pragmatic properties of certain) contexts systematically trigger focus." Discourse particles have also been described as marking a relation with the context. Zeevat (2004, 180) describes the meaning of discourse particles as follows: "if the relation R obtains between context parameters and the current utterance, add the particle P to the utterance."

The research discussed in this thesis shows that the assumption that information structure marking is automatically conditioned by context is problematic. This is most clearly shown in Chapter 3 on the focus construction and in Chapter 7 on contrastive and additive particles. In Chapter 3, I show that the focus construction is not obligatory in any of the contexts that have

traditionally been considered to trigger focus marking. The examples from spontaneous discourse show that people use the focus construction strategically, when they consider it important to highlight the common-ground update. In Chapter 7, I show that additive and contrastive particles can often be used in the exact same context, even though their meanings may suggest a complementary distribution. Rather than being triggered by context, the particles are used to convey the speaker's perspective on the situation.

Of course, this does not mean that context does not constrain the use of information structure markers. On the contrary, context plays a very important role. People use focus marking to convey their view on the context, i.e. that it makes a certain common-ground update relevant. Likewise, people use contrastive particles to convey that they have seen the context as including something that is opposite to what they are currently saying. There are some contexts in which the use of information structure markers is highly preferred. This is the case for answers to subject content questions (at least in elicitation sessions), which very frequently contain focus marking of the subject. It is also the case for additive particles when two sequential identical events are described. In both these cases, marking is used in more than 75% of the cases, whereas it is used much less frequently in other contexts. This does not mean that the particle or construction has the function of marking this context. It simply means that in this context, people are more inclined to want to convey the construal that the particle or construction conveys. The reason could be that there is something unusual about this context. It is very well possible that in different languages, different solutions are found to mark these unusual situations. In English, there is a specific particle to mark identity of events (*also/too*). In Avatime, in the absence of such a specific particle, the marker *tsyɛ* is used, which indicates that two events 'go together'. So, (i) contexts restrict the applicability of certain information structure markers, but never uniquely determine their use and (ii) some contexts seem to particularly encourage marking.

Information structure markers thus operate on the interface between context and speaker intentions. Information structure markers can be used in different types of context and yet express more general meanings. Within constraints imposed by the context, speakers are free to use information structure marking when they feel it is appropriate or necessary.

8.2.2 Notions of information structure in Avatime

In Chapter 1, I identified as one of the aims of this thesis to illuminate to what extent pre-established notions of information structure are cross-linguistically applicable. In this Section, I will discuss the three main re-

lational notions of information structure: focus, topic, and contrast. I will evaluate whether these notions have been useful in the description of the Avatime information structure constructions and particles and to what extent the Avatime data has shed new light on the definitions of these notions.

8.2.2.1 Focus

The Avatime focus construction is the clearest case of the correspondence of an Avatime linguistic category to a pre-established notion of information structure. The meaning I propose for the focus construction, highlighting a common-ground update, is consistent with most definitions of and intuitions about the notion of focus in the literature. This consistency seems to support the idea of focus as a universal notion of information structure that is realized in different languages in different ways (see e.g. Zimmermann & Onea, 2011). However, the fact that Avatime has a specialized marker for focus does not mean that all languages do. Matić & Wedgwood (2013) convincingly argue that the interpretive effect of focus can arise in different ways in different languages. What seem to be focus markers in different languages cannot necessarily be analyzed as different ways of realizing one and the same universal category. Of course, this does not preclude that there are languages in which the category of focus as suggested in the literature exists. Avatime seems to be one such language.

However, there is an important difference between the Avatime focus construction and the more frequently discussed prosodic focus marking in European languages: the Avatime focus construction is not obligatory. In the literature on other non-obligatory focus constructions, these have often been analyzed as encoding subtypes of focus (see e.g. É. Kiss, 1998). The reasoning behind this is that if a certain construction seems to express focus, but does not occur in all focus-triggering contexts, it must be triggered by a more specific type of context. The main subtype of focus usually proposed is contrastive focus. This means that in languages with a non-obligatory focus construction, focus is only triggered by contrastive contexts. Definitions of what exactly counts as a contrastive context differ (see also Section 3.4.1) and different subtypes of contrastive focus have been proposed.

In Section 3.4, I have shown that the Avatime focus construction is often used in different types of contrastive contexts, but no single type of context can account for all its uses. This is where there is a mismatch between pre-established categories and the Avatime focus construction: none of the subtypes proposed to account for non-obligatory focus constructions map onto the Avatime focus construction. This can be seen as a case of the problem of equating context with meaning, as described in the previous section.

If context is equated with meaning, one has to search for a specific type of context that triggers the construction. However, if this idea is abandoned, the focus construction can simply be analyzed as encoding focus. As it is a marked construction, it is only used when, for some reason, the speaker finds it important to point out the common-ground update.

8.2.2.2 Topic

As discussed in Section 1.2.2, the topic of the sentence is most commonly defined as 'what the sentence is about'. In this thesis, four linguistic markers (constructions or particles) have been discussed that seem to mark something like topic. The first is left dislocation. In Section 4.4, I described the function of left dislocation as highlighting[1] a background element to indicate that it is important to keep in mind for processing of the upcoming discourse. This definition is often compatible with a definition in terms of what the sentence is about. However, there clearly are cases of left dislocation in which the purpose of the sentence is not to provide information about the left dislocated element (see Section 4.4.2). The function I propose is more general: a background element may be highlighted to indicate that this is something the speaker wants to provide information about, but it may also be highlighted for other reasons such as referent introduction or indicating set membership.

Another element that may have something to do with the notion of topic is the clause marker $=E$ which was discussed in Section 4.2.3. Analogous particles in other Kwa languages have often been called topic markers (see also Section 1.3.2). The particle attaches to left dislocated elements, subjects, some types of subordinate clauses and some types of main clauses. I suggested that it is used to mark background or presupposed information. This seems to be consistent with an analysis as a topic marker, as topics are also presupposed. However, the optionality of the particle suggests that it does not really mark an element as 'what the sentence is about'. The particle can be freely added to and removed from left dislocated elements and subjects without an apparent change in meaning. This suggests that the particle does not have an important function on its own. It is more likely used to emphasize the status of a part of the sentence as background material. However, more research is needed to determine exactly what the particle is used for and to what extent it associates with topics.

[1]Note that I have used the term highlighting both for the focus construction and for left dislocation. These two constructions have in common that they draw attention to, i.e. highlight, a particular element of the sentence. However, the reason for highlighting is different in the two constructions.

Finally, the contrastive and additive particles also seem to mark topics, at least in some cases. In Section 5.4.1, I argued that the contrastive particles seem to mark topics because they separate the sentence into two parts: a part that encodes an opposition to some presupposed information and a part that marks an element of the sentence as one of a set of elements with respect to which the opposition is made. The opposite information is thus usually information 'about' the marked element. In these cases, the marked elements can be called topics. However, the particle clearly does not mark the element as a topic only: it indicates that there is a contrast with respect to the marked element. Moreover, the marked element does not have to be a topic: two out of the three contrastive particles can associate with the entire sentence, marking it as contrastive, but not as topical. One of these particles can also associate with focus-marked elements. It seems, thus, that these particles are not mainly topic-markers. They are mainly markers of contrast, but when they associate with an element of the proposition, this is usually interpreted as what the sentence is about.

A similar argument can be made for the additive particle *tsyɛ*. This is clearly not a topic marker, as it can also associate with elements that are in focus. However, when it is used in the context of non-identical propositions, the same kind of split in the sentence takes place as with the contrastive particles. The element that the particle associates with is one of a set of elements with respect to which it is said that they are involved in events that 'go together'. The information encoded in these events can thus be interpreted as information about the additive-marked constituent.

Summarizing, it seems that the intuition that a particle or construction marks something as 'what the sentence is about' can have different sources. In the case of left dislocation and perhaps also in the case of the particle $=E$, this intuition arises because the marked element is background information. If background information is marked, this tends to be because it is important information to process in order to understand the rest of the sentence. This will often lead to the intuition that it is the element about which the sentence provides information. In the case of the contrastive and additive particles, the topic interpretation arises because of the meaning of the particles. There is thus no marker in Avatime that has as its primary function to mark an element of the sentence as the topic. Rather, topic (like focus, according to Matić & Wedgwood, 2013) is an interpretive effect that can arise in different ways.

8.2.2.3 Contrast

There is some debate about whether or not contrast is an independent notion of information structure. Some authors equate contrast to evoking alternatives, in which case it is essentially the same as focus (Büring, 2003; Krifka, 2007). Contrastive topics, on that view, are combinations of topic and focus. Others view contrast as more than simply evoking alternatives: contrast also involves an opposition (Taglicht, 1984; Myhill & Xing, 1996; Prince, 1998). I have referred to this point of view as the definition of contrast in the narrow sense. Exactly how to define the notion of opposition has not been made clear on any account.

If contrast is defined in the broad sense, as evoking alternatives, many particles and constructions in Avatime can be called contrastive. The focus construction often marks the presence of a contextually relevant alternative, left dislocation may be used to indicate set membership and both the contrastive and additive particle can evoke alternatives. In this sense, contrast is thus not a very useful notion for Avatime. If contrast is defined in the narrow sense, it applies to the Avatime contrastive particles.

My study of the Avatime contrastive particles has shown that they mark contrast in the narrow sense and has clarified how the notion of opposition is to be defined (see Section 5.3). When there is an opposition, two predicates or propositions are members of a set. One of the set members either directly negates the other or the two set members encode closely related events that are mutually exclusive in the context. The notion of contrast, if defined more specifically, is thus applicable to the Avatime data.

Contrast also seems to play a role in the use of the focus construction. In many cases of focus marking, the context is contrastive in the sense that it is in contrast to an expectation, assumption, belief or something that has been previously mentioned. In these cases, the same notion of opposition seems to be relevant, as the focus-marked element usually excludes the alternative. However, focus marking is most of the time not used to mark the opposition as such. Rather, it marks the particular element by which the sentence differs from the other member of the opposition, i.e. the element that updates the common ground.

There seems to be a preferred division of labor between the focus construction and the contrastive particles. The focus construction is most suitable for drawing attention to the part of the sentence that differs from a presupposition or previously mentioned context. This is useful when the speaker wants to indicate exactly what is wrong with the presupposition. Focus marking is less preferred for parallel focus, because in those cases, it may be more important to draw the addressee's attention to the elements

with respect to which the contrast is made. There, the contrastive particles are more useful because they indicate there is an opposition, but at the same time mark the element with respect to which there is an opposition.

8.3 Future directions

Information structure is a universal phenomenon, in the sense that in all languages, speakers need to provide new information and link this to previously known information. However, how and to what extent linguistic forms are used to convey information structure is subject to cross-linguistic variation. It is important to investigate the extent of cross-linguistic variation in information structure marking in order to understand what aspects of the context and the addressee's presumed mental state can be important for the speaker's strategic construal of the scene described. However, so far, the use of pre-established labels such as topic and focus has impeded in-depth comparison. For an adequate typology, more detailed descriptions are needed of exactly when information structure markers are used and what general function they might have. This way, typology can proceed in a bottom-up fashion without a need for pre-established theoretical categories (see Haspelmath, 2007, for general arguments against pre-established categories). The work presented in this thesis is an example of the kind of description that can be used for such a typology. Comparison to other languages can then be carried out on two levels. First, on the level of general meanings: what kinds of information structure functions are encoded in the grammar of different languages and how do these relate to other grammatical properties of the language? Second, on the level of contexts of use. Which constructions are used in which contexts with which frequency in different languages? Are constructions that seem to have the same general meaning always used in the same contexts? With more detailed descriptions of information structure markers in different languages available, such cross-linguistic comparisons can be made.

Another interesting angle to explore further is the processing of information structure in the brain. This is important because the main reason to use information structure marking seems to be to make language comprehension easier for the addressee, by taking into account her presumed knowledge state. Research on prosodic focus marking has shown that this recruits general purpose attention networks in the brain (Kristensen et al., 2012). This has been argued to indicate that the speaker is drawing the addressee's attention to the most important parts of the sentence to make sure these are being processed, as listeners do not always attend to all parts of the sentence (so-called good-enough processing, see Ferreira et al., 2002). An

interesting question is whether a similar process is going on in a language such as Avatime, where focus is marked morpho-syntactically. Also, as focus is not obligatorily marked in Avatime, does this mean listeners attend to the entire sentence equally in unmarked sentences, or do listeners use other clues to determine where to focus their attention? It would also be interesting to look into the processing of contrast and additivity. As was shown in Chapter 7, contrastive and additive particles are not obligatory. A question is whether their presence aids comprehension in the sense that they make it easier to integrate the marked information with previous knowledge. If so, another question is whether this effect differs depending on the context of use. Psycholinguistic research into information structure has so far mostly been done on European languages. It is important to include lesser-known languages with different information structure marking strategies, to get a more complete view of the ways in which linguistic forms can modulate the listener's attention and integration of information. The research presented in this thesis has laid the foundation necessary to address these kinds of questions for Avatime.

To sum up, this thesis has contributed to the documentation of cross-linguistic variation in the domain of information structure. It has described in detail the usages and meanings of information structure markers in Avatime. I have shown that even though pre-established notions of information structure can be informative in linguistic description, they do not necessarily map onto to linguistic markers in a particular language. In future research, this approach should be extended to other languages to form the basis for a more thorough typology of information structure meanings and functions.

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Samenvatting

In dit proefschrift heb ik onderzocht hoe informatiestructuur wordt uitgedrukt in het Avatime, een taal die wordt gesproken in Ghana. Het Avatime is een Ghana-Togo Mountain taal, onderdeel van de Kwa taalfamilie, die weer onderdeel is van de Niger-Congo taalfamilie.

Het proefschrift is gebaseerd op twee gerelateerde doelstellingen. Het eerste is nauwkeurig de vorm en functie beschrijven van een aantal partikels en constructies die informatiestructuur uitdrukken in het Avatime. Het tweede doel is om de gevonden functies te vergelijken met categorieën van informatiestructuur die in de literatuur voor andere talen zijn voorgesteld.

Voordat ik inga op de analyse van het Avatime, zal ik eerst een aantal belangrijke begrippen toelichten.

De term informatiestructuur verwijst naar de manieren waarop taalgebruikers informatie in hun zinnen verpakken. De informatiestructuur van de zin geeft aan hoe de informatie in de zin gerelateerd is aan de voorkennis en de actieve mentale representaties van de luisteraar. Voorbeelden hiervan zijn te zien in de mini-dialogen in (1). De zin van spreker B bevat steeds dezelfde informatie, maar de informatiestructuur verschilt, vanwege verschillen in de voorkennis van de luisteraar (spreker A). In het Nederlands wordt informatiestructuur meestal door middel van intonatie uitgedrukt. Het zinsdeel dat informatie verstrekt die voor de luisteraar nieuw is, krijgt het voornaamste zinsaccent toebedeeld (in het voorbeeld weergegeven door middel van hoofdletters). Dit wordt de *focus* genoemd. De *focus* kan ook op andere manieren gemarkeerd worden. In (1d) geeft bijvoorbeeld het partikel *wel* aan dat de focus niet op een zinsdeel ligt, maar op de waarheidswaarde van de zin (wel of niet waar).

(1) a. A: *Wie heeft de taart opgegeten?*
B: *SAM heeft de taart opgegeten.*

b. A: *Wat heeft Sam opgegeten?*
B: *Sam heeft de TAART opgegeten.*

c. A: *Wat heeft Sam met de taart gedaan?*
   B: *Sam heeft de taart OPGEGETEN.*

d. A: *Volgens mij heeft Sam de taart niet opgegeten.*
   B: *Sam heeft de taart WEL opgegeten.*

e. A: *Wat is er met de taart en het brood gebeurd?*
   B: *De **taart** heeft SAM opgegeten (maar waar het brood is gebleven weet ik niet).*

Nieuwe informatie in een zin is meestal gerelateerd aan informatie die voor de luisteraar al bekend was. Het gedeelte van de zin waaraan de nieuwe informatie gerelateerd wordt, wordt *topic* genoemd. Topics worden vaak niet speciaal gemarkeerd. In het Nederlands worden topics alleen gemarkeerd als ze nieuw zijn of als ze gecontrasteerd worden. Dit is te zien in (1e), waar het (contrastieve) topic *de taart* aan het begin van de zin wordt geplaatst en met stijgende intonatie wordt uitgesproken.

Het laatste begrip dat belangrijk is in dit proefschrift is *contrast*. Als een zinsdeel als contrastief gemarkeerd wordt, betekent dit dat er een alternatief voor dit zinsdeel is in de context. In (1e) is brood het alternatief voor taart. Volgens sommige definities is er bij contrast niet alleen sprake van een alternatief, maar is er ook altijd een tegenstelling tussen wat gezegd wordt over het contrastief benadrukte zinsdeel en het alternatief.

Om data te verzamelen over hoe informatiestructuur wordt uitgedrukt in het Avatime, heb ik veldwerk gedaan in de Avatime gemeenschap. Tijdens dit veldwerk heb ik verschillende methoden gebruikt om data te verkrijgen. De belangrijkste was het opnemen en transcriberen van spontane spraak. Ik heb verschillende genres opgenomen: traditionele verhalen, beschrijvingen van procedures (hoe wordt rijst verbouwd, hoe vinden begrafenissen plaats, etc.), openbare bijeenkomsten en alledaagse conversaties. Voor meer controle over de data heb ik ook gebruik gemaakt van methoden waarbij proefpersonen een afbeelding of video te zien krijgen en beschrijven wat ze zien. Voor mijn experiment in hoofdstuk 7 heb ik zelf stimulus video's ontworpen om het gebruik van additieve en contrastieve partikels te onderzoeken. Ten slotte heb ik ook sprekers gevraagd losse woorden en zinnen te vertalen vanuit het Engels en Avatime zinnen aan sprekers voorgelegd met de vraag of ze correct zijn. Deze laatste methoden zijn minder betrouwbaar dan het gebruik van spontane spraak, maar zijn vaak nuttig om een eerste indruk te krijgen van de te onderzoeken fenomenen.

Na de introductie in hoofdstuk 1, geef ik in **hoofdstuk 2** een overzicht van de grammatica van het Avatime. Belangrijke eigenschappen van de taal die ik hier introduceer zijn het toonsysteem met een lage, een hoge en een extra hoge toon; partikels die aan het eind van de naamwoordgroep voorkomen;

het verplicht markeren van het onderwerp op het werkwoord; de mogelijkheid tot het weglaten van het lijdend voorwerp; de stricte SVO (onderwerp - werkwoord - lijdend voorwerp) woordvolgorde; de formatie van vragen door middel van de focusconstructie; en verschillende typen samengestelde zinnen.

In **hoofdstuk 3** bespreek ik de focusconstructie. Het Avatime heeft een focusconstructie waarbij het gefocuste element vooraan in de zin wordt geplaatst en met een extra hoge toon gemarkeerd wordt. Dit is te zien in voorbeeld (2). In (2a) zien we de reguliere manier om de informatie in de zin uit te drukken. In (2b) zien we de focusconstructie, waarbij extra benadrukt wordt dat 'mijn tante' voor de luisteraar de nieuwe informatie is. Het woord *monedaá* 'mijn tante' staat nu voor het werkwoord in plaats van er achter en de laatste lettergreep heeft een extra hoge toon (aangeduid met het accent aigu op de laatste *a*).

(2) a. *mà-panì* *mo-nedaa*
1s-groeten 1s.POS-tante
'Ik groette mijn tante.'

b. ***mo-nedaá*** *mà-panɔ*
1s.POS-tante:FOC 1s-groeten
'Ik groette MIJN TANTE.' (elic-foc_100602_SO)

Wanneer een element gemarkeerd wordt voor focus, is dit meestal ook het gedeelte van de zin dat geïnterpreteerd wordt als in focus (nieuw voor de luisteraar). Echter, als het lijdend voorwerp gemarkeerd wordt voor focus, kan dit ook geïnterpreteerd worden als focus op het predikaat (werkwoord + lijdend voorwerp) en als het onderwerp gemarkeerd wordt voor focus, kan dit geïnterpreteerd worden als focus op de hele zin. Ook zijn er verschillende interpretaties mogelijk wanneer het werkwoord gemarkeerd wordt voor focus: focus op het werkwoord zelf, de werkwoordstijd, het aspect of de waarheidswaarde.

Informatie die nieuw is voor de luisteraar hoeft in het Avatime niet verplicht gemarkeerd te worden voor focus. Bij antwoorden op open vragen zoals in (1a-c) wordt het element in focus vaak niet gemarkeerd. Of het wel of niet gemarkeerd wordt hangt onder andere af van de grammaticale status van het element in focus: als het onderwerp van de zin in focus is, wordt dit vaak gemarkeerd, maar als het lijdend voorwerp in focus is, wordt dit minder vaak gemarkeerd.

In mijn corpus van spontane spraak is te zien dat sprekers de focusconstructie voornamelijk gebruiken wanneer het zinsdeel in focus een aanname of verwachting tegenspreekt en wanneer er een alternatief is voor het zins-

deel in focus. In deze gevallen is de nieuwe informatie in de zin mogelijk controversieel en daarom is het voor de spreker belangrijk er extra aandacht op te vestigen.

Hoofdstuk 4 gaat over links-dislocatie. In deze constructie wordt een element aan het begin van de zin geplaatst (vóór het onderwerp en het focus-gemarkeerde element, als die er zijn), vaak gevolgd door een korte pauze. In het vervolg van de zin wordt vaak opnieuw naar het initiële element verwezen door middel van een voornaamwoord, een zogenaamd *resumptive pronoun*. Een voorbeeld is te zien in (3). Hier is het zinsdeel *ɔ́dzɛ yɛ fótoà* 'de foto's van de vrouw' aan het begin van de zin geplaatst. Verderop in de zin verwijst het voornaamwoord *ba* 'zij/die' terug naar het initiële zinsdeel.

(3) [*ɔ́dzɛ yɛ fóto-à*] *bɛ-zɛ̀* ***ba*** *pɔ́* *a*
vrouw POS foto-DEF.P 3p-ontvangen 3p COMPL Q
'[De foto's van de vrouw], hebben ze **die** allemaal ontvangen?'
(conv-funeral_100528_8-1)

In het Engels is het *resumptive pronoun* een noodzakelijk onderdeel van links-dislocatie. In het Avatime zijn *resumptive pronouns* niet altijd nodig, omdat voornaamwoorden, anders dan in het Engels, vaak weggelaten kunnen worden.

In het Avatime komt links-dislocatie regelmatig voor in bijzinnen. Dit is opmerkelijk, aangezien sommige onderzoekers beweren dat dit in andere talen, zoals het Engels, onmogelijk is. Het initiële element in links-dislocatie wordt soms geanalyseerd als een los fragment dat niet grammaticaal verbonden is met de rest van de zin. In een dergelijke analyse kan links-dislocatie niet voorkomen in bijzinnen. In de theorie *Role and Reference Grammar* is links-dislocatie in bijzinnen niet problematisch, aangezien de initiële elementen als onderdeel van de zin worden gezien.

Bij links-dislocatie wordt een achtergrondelement uit de zin benadrukt. Dit is een element dat bij de luisteraar al bekend is, maar waar de spreker toch extra aandacht op wil vestigen omdat het belangrijk is voor het verwerken van de rest van de zin. De meest voorkomende redenen hiervoor zijn dat het initiële element verwijst naar een nieuwe referent of dat het deel uitmaakt van een set waaruit ook andere elementen relevant zijn.

In **hoofdstuk 5** bespreek ik drie contrastieve partikels: *kɔ*, *pɔ̀* en *xunyɔ*. Deze partikels betekenen zoiets als 'daarentegen' en staan direct na het element dat ze markeren. Dit is vaak het onderwerp van de zin of het initiële element in links-dislocatie. Het partikel *pɔ̀* kan, in tegenstelling tot de twee andere partikels, toegevoegd worden aan focus-gemarkeerde elementen. *Xunyɔ* en *pɔ̀*, maar niet *kɔ*, kunnen aan het eind van een zin geplaatst

worden.

De partikels geven aan dat er een tegenstelling is tussen het gemarkeerde element en een alternatief. Dit betekent dat iets dat geldt voor het gemarkeerde element niet geldt voor het alternatief. Wanneer de partikels aan het eind van de zin voorkomen, markeren ze de hele zin als tegengesteld aan een vooronderstelling.

In **hoofdstuk 6** onderzoek ik de betekenis en het gebruik van het additieve partikel *tsyɛ* 'ook'. Net als de contrastieve partikels wordt *tsyɛ* direct na het element dat het markeert geplaatst. Het wordt vaak toegevoegd aan het onderwerp van de zin en aan initiële elementen in links-dislocatie, maar het kan ook het lijdend voorwerp, een bepaling, het predicaat of een bijzin markeren. Additieve partikels in beter bekende talen zoals het Engels en het Duits hebben altijd betrekking op het gedeelte van de zin dat in focus is. In het Avatime is dit niet het geval: *tsyɛ* kan ook na elementen geplaatst worden die niet in focus zijn.

Er is ook een verschil in betekenis. De Engelse, Duitse en Nederlandse additieve partikels geven aan dat er een alternatief is voor het gemarkeerde element waarvoor hetzelfde geldt. Een zin als *Anna speelt viool en Jan speelt ook gitaar* klinkt vreemd, tenzij eerder in de context is genoemd dat iemand anders dan Jan gitaar speelt. In het Avatime verwijst het partikel *tsyɛ* niet noodzakelijkerwijs naar een bijna-identieke alternatieve zin. Dit is te zien in voorbeeld (4), waar *tsyɛ* gebruikt wordt ondanks dat 'vergeven' en 'opgroeien' niet identiek zijn.

(4) Uit een verhaal over een familie. Een man keert terug naar huis nadat hij lange tijd in de gevangenis heeft gezeten.

1 *ye-dze* *á-kɔ* *tsya=yɛ* *kɭ́lɛ* *gì* *a-bɪ̀tɛ* *petee*
3s.POS-vrouw 3s-nemen vergeven=3s hoe REL 3s-doen alles
'Zijn vrouw vergaf hem alles dat hij had gedaan.'

2 *lósò* *ye-bi-è* ***tsyɛ*** *a-é-tsì*
en 3s.POS-kind-DEF **ADD** 3s-VEN-opgroeien
e-dzì *ɔ̀yásɔwi*
3s-worden jongeman
'Zijn zoon (*tsyɛ*) is opgegroeid en een jongeman geworden.'
(famprob_110401_MeD-BeK_story)

Ik analyseer de betekenis van *tsyɛ* als volgt: *tsyɛ* geeft aan dat er een contextueel relevant alternatief is voor het gemarkeerde element en dat het aannemelijk is dat de gebeurtenissen beschreven in de twee zinnen samen voorkomen.

In **hoofdstuk 7** presenteer ik de resultaten van een verkennend experiment waarin ik het gebruik van de additieve en contrastieve partikels verder

onderzoek. In dit experiment werd aan de deelnemers gevraagd om korte filmpjes te beschrijven, waarin steeds twee gebeurtenissen werden getoond. Het experiment geeft aanvullend bewijs voor de analyse van de partikels die in de voorgaande hoofdstukken uiteen is gezet. Het additieve partikel *tsyɛ* lijkt vaker gebruikt te worden wanneer het aannemelijker is dat de twee gebeurtenissen samen voorkomen. Het additieve partikel werd minder vaak gebruikt wanneer de twee gebeurtenissen niet direct na elkaar plaatsvonden en ook wanneer de twee personen in de gebeurtenissen minder makkelijk als leden van dezelfde set konden worden gezien. De contrastieve partikels *kɔ*, *pɔ̀* en *xunyɔ* werden erg weinig gebruikt en er waren geen significante verschillen tussen de verschillende niet-identieke gebeurtenissen. Een interessante uitkomst van dit experiment is dat de additieve en contrastieve partikels gebruikt kunnen worden in beschrijvingen van dezelfde gebeurtenissen. Dit betekent dat het gebruik van de partikels niet bepaald wordt door de context, maar dat de spreker de partikels strategisch gebruikt om haar perspectief op de situatie weer te geven.

In **hoofdstuk 8** bespreek ik de theoretische implicaties van mijn onderzoek en geeft ik mogelijke richtingen aan voor vervolgonderzoek.

In mijn proefschrift komt de relatie tussen zinnen en context duidelijk naar voren. Zowel uit hoofdstuk 3 als uit hoofdstuk 7 blijkt dat markering van informatiestructuur niet gedreven wordt door de context, maar door wat de spreker wil overbrengen. Tegelijkertijd is context wel belangrijk in de regulering van de doeleinden van de spreker: in sommige contexten zal de spreker meer geneigd zijn om informatiestructuur te markeren dan in andere.

De drie informatiestructuurbegrippen *focus*, *topic* en *contrast* zijn in verschillende mate relevant voor de beschrijving van het Avatime. Het begrip focus zoals voorgesteld in literatuur over andere talen komt overeen met het gebruik van de Avatime focus-constructie. Het begrip focus is dus relevant voor de beschrijving van zeer uiteenlopende talen. Er is echter wel een belangrijk verschil tussen focus in het Avatime en in Europese talen zoals het Engels en het Nederlands: in het Avatime wordt focus niet verplicht gemarkeerd, terwijl in het Engels en Nederlands focus altijd gemarkeerd wordt door middel van intonatie. De Nederlandse focus-intonatie en Avatime focus-constructie delen dus een onderliggende betekenis, maar worden niet noodzakelijk op dezelfde manier gebruikt. Het begrip *topic* lijkt van toepassing op de initiële elementen in links-dislocatie en elementen met contrastieve partikels. Intuitief gezien zijn deze elementen vaak ‘waar de zin om draait’. Echter, in beide gevallen is de interpretatie als topic een neveneffect van een algemenere functie. Het begrip topic is dus in het Avatime geen basaal begrip en de interpretatie van een element as topic kan op verschillende ma-

nieren ontstaan. Het begrip *contrast*, indien gedefiniëerd in de nauwe zin als het uitdrukken van een tegenstelling tussen twee elementen, verklaart het gebruik van de contrastieve partikels. De focus-constructie heeft ook vaak een contrastieve interpretatie. Het verschil is dat de focus-constructie precies het element in de zin markeert dat een vooronderstelling of vergelijkbare zin tegenspreekt, terwijl de contrastieve partikels alleen aanduiden dat er een tegenstelling is en de aandacht richten op de elementen waar de tegenstelling betrekking op heeft.

In vervolgonderzoek kunnen mijn methoden ook toegepast worden op andere talen. Vergelijkend onderzoek naar systemen van informatiestructuur in verschillende talen wordt gehinderd door het gebruik van labels zoals topic en focus zonder nauwkeurige beschrijving van de constructies waar ze op toegepast worden. Op deze manier blijven onderliggende verschillen tussen talen verborgen. Voor een goed vergelijkend onderzoek zijn gedetailleerde beschrijvingen nodig van het gebruik van informatiestructuur-gerelateerde constructies en partikels in spontane spraak. Dit proefschrift vormt daaraan een bijdrage.

Curriculum vitae

Saskia van Putten was born in Huizen, The Netherlands, on March 24, 1985. She did her BA in Languages and Cultures of Africa at Leiden University and graduated in 2007. After that, she continued with the Research MA in Linguistics at Leiden University. During her MA studies, she received a Field Trip Grant from the Endangered Languages Documentation Programme for a description and documentation of Avatime, spoken in Ghana. She wrote her MA thesis on the expression of motion events in Avatime and graduated *cum laude* in 2009. In that same year, she started her PhD research at the Max Planck Institute for Psycholinguistics in the Syntax, Typology and Information Structure group. For her PhD research, she continued working on Avatime and went on several field trips for a total of about 7 months to investigate the expression of information structure.

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